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FŒMINÆ

LECTISSIMÆ ET ORNATISSIMÆ

JULIÆ

DUCISSÆ NORTHUMBRIENSI

NONUM HUNC

NATURÆ VIVARIII

FASCICULUM,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

TO

HER GRACE

THE

DUTCHESS

OF

NORTHUMBERLAND

THIS NINTH VOLUME

OF THE

NATURALIST'S MISCELLANY

IS

RESPECTFULLY INSCRIBED,

BY

GEORGE SHAW,

FREDERICK P. NODDER.

1798.

VULTUR CALIFORNIANUS.



CHARACTER GENERICUS.

Rostrum rectum, apice aduncum.

Caput impenne, antice nuda cute.

Lingua bifida.

Lin. Syst. Nat. p. 121.

CHARACTER SPECIFICUS.

VULTUR niger, rostro albedo, capite colloque
denudatis pallidis, torquis pectorisque plumis
lanceolatis.

Pedes nigri. Ungues magni, longi, acuti.

Vulturem depinximus qui in maximis sui generis
habetur, superans mole Vulturem Percnopterus
Linnæi, et ipso Grypho pene par. Color niger;
apices autem remigum secundariorum qui, alis
clausis, super dorsum replicantur, albidos habent
margines interiores. Alarum tectrices versus mar-
gines subfuscae sunt. Caput collumque fere denu-
data, fetacea quasi lanugine huc, illuc, rarissime
consperguntur. Collum rubescit, lateribus nonnihil
subcæruleis. Capitis vertex, occiput, et rostri re-
gio nigricant. Rostrum, forma et colore rostro
Gryphi

Gryphi simillimum, apicem habet subobtusum. Caret caput omni caruncula. Cingitur collum inferius torque e plumis lanceolatis constante, quarum fibræ quasi setaceæ seu subcorneæ videntur; quibusque similes quoque sunt omni ex parte plumæ pectoris, abdominis, femorumque, excepta magnitudine. Crura pedesque qualia sunt Gryphi, ungues gerunt multo acutiores, longiores, et magis curvatos.

Vulturi Monacho Linnæi præcipue affinis est hæc species. Nullum tamen tuber habet in capite, licet super occiput affurgere paululum videatur nigricans quasi zona. Et quamvis Monacho rostrum sit paulo acutius, nonnihil tamen addubito annon fortasse sexu tantum discrepet ab eo hæc nostra avis. Alæ longæ. Cauda magna, subquadrata. Crura pedesque nigra. Notandum porro est quod rachis remigum superficiem inferiorem habeat albidam, maculis plurimis sagittatis transversim notatam, non secus ac Grypho contigit.

E California in Angliam detulit hunc Vulturem Dominus Menzies, qui in itinere nautico Dominum Vancouver non ita pridem comitatus est. Conspici possit avis ipsa in Museo Britannico.

THE CALIFORNIAN VULTURE.



GENERIC CHARACTER.

Bill strait, hooked at the tip.

Head commonly bare of feathers, with a naked skin in front.

Tongue bifid.

SPECIFIC CHARACTER.

Black VULTURE with whitish beak; the head and neck unfeathered and of a pale color; the plumes of the collar and breast lanceolate.

The feet are black: the claws large, long, and sharp.

The species of Vulture here represented is amongst the largest of the tribe, exceeding in magnitude the Vultur Percnopterus of Linnæus, and even approaching in size to the Condor or Vultur Gryphus. Its color is black, but the tips of the last or interior secondary remiges, which lap over the back, are whitish, especially on the interior edge: the covert-feathers of the wings are of a brownish tinge towards their



Phaethon rubricauda Linn. *Phaethon rubricauda* Linn. *Phaethon rubricauda* Linn. *Phaethon rubricauda* Linn.

their edges. The head and neck are naked, or very sparingly sprinkled in some parts with a kind of fetaceous down: the color of the neck is reddish, inclining to blueish on each side: the head is blackish at the top and back part, as well as round the beak, which extremely resembles that of the Condor in shape and color, and is rather obtuse at the extremity. The head is entirely void of any carunculated appearance: the lower part of the neck is surrounded by a ruff or wreath of black, lanceolate plumes, the fibres of which have a kind of fetaceous or horny appearance. The feathers of the breast, abdomen, and thighs, are of the same structure and shape in proportion to their size. The legs and feet resemble those of the Condor, but the claws are much sharper, longer, and of a more curved form.

The species of all others to which it seems to be most allied is the Vultur Monachus of Linnæus: it has however no protuberance on the head, as in that bird, though the occiput is marked by a dark patch or zone, which seems indeed to rise a little above the surface of the other part. Perhaps it may be a sexual difference of that bird, notwithstanding the different form of the bill, which in the V. Monachus is of a somewhat sharper form. The wings are long: the tail large, and of a squarish shape: the legs and claws are black. It may be added that the under surfaces of the shafts of the wing-feathers in this bird are of the same complexion with those of the Condor; viz. whitish, with numerous arrow-shaped transverse marks or bars.

This

This Vulture was brought over by Mr. Menzies, during his expedition with Captain Vancouver, from the coast of California, and is now in the British Museum.

CANCER BERNARDUS.



CHARACTER GENERICUS.

Pedes octo (rarius decem vel sex) insuper manus
duæ chelatæ.

Oculi distantes, plerisque pedunculati, mobiles.

Palpi duo cheliferi.

Cauda articulata, inermis.

CHARACTER SPECIFICUS, &c.

CANCER macrourus parasiticus, chelis cordatis
muricatis, dextra majore.

Lin. Syst. Nat. p. 1049.

ASTACUS Bernardus.

Degeer. inf. 7. p. 405. t. 23. f. 5. 6.

Matth. Diosc. 230.

Rondel. pisc. 1. p. 553.

Gesn. aquat. 161.

Aldr. exang. 218.

Cancrum Diogenem, varias orbis Indici plagas
incolentem, in hoc opere jam descripsimus. Species
quam ostendit tabula, in litoribus Europæis non raro
conspicitur, in Britannicis sæpissime. Cum careat
non

non fecus ac cancer Diogenes, tegumento corporis
crustato; eo fit ut testas univalves incolat; domi-
cilium mutans pro aucta mole. Cancri Diogenis
chela sinistra plerumque major est dextra; Bernardi
dextra sinistram superat. Color communis rubro-
flavescit, quem magis minusve saturatum habent
specimina diversa.



THE HERMIT CRAB.



GENERIC CHARACTER.

Feet commonly eight, (in some species six or ten) besides two chelated ones.

Eyes distant, in most species footstalked, moveable.

Tail articulated, unarmed.

SPECIFIC CHARACTER, &c.

Long-tailed parasitic Crab, with rough, heart-shaped chelæ; the right commonly largest.

The Soldier CRAB.

The HERMIT-CRAB.

The Cancer Diogenes or Indian Hermit-Crab has already been figured in the present work. The species now exhibited is by no means uncommon on most of the European coasts, and is very frequently met with on those of our own island. Like the Diogenes, being naturally destitute of a crustaceous covering to the body, it inhabits the univalve shells, altering

altering its habitation from time to time, according to its increased growth. In the Diogenes the left claw is much larger than the right: in the present species, on the contrary, the right claw is commonly the largest. The general color of this animal is a yellowish red, paler or deeper in different individuals.

FASCIOLA CLAVATA.



CHARACTER GENERICUS.

Corpus planiusculum : poro terminali ventralique.

Lin. Syst. Nat. p. 1077.

CHARACTER SPECIFICUS, &c.

FASCIOLA teretiuscula livida, postice ventricoso-clavata.

FASCIOLA corpore teretiusculo annulato rugoso albido postice gibbofo.

Act. Lin. vol. 1. p. 187. *t.* 17. *fig.* 2.

FASCIOLA ventricosa.

Pall. spic. zool. 10. p. 17. *t.* 1. *fig.* 9. 10.

PLANARIA ventricosa.

Lin. Syst. Nat. Gmel. p. 3089.

Fasciolam clavatam, congenerum facile maximam, quæque vinculo quodam connectere videtur genera *Fasciolæ*, *Hirudinis*, et *Sipunculi*, primus, ut opinor, descripsit celeberrimus Pallas in opere cui titulus *Spicilegia Zoologica*. Descripsit quoque eam Dominus Menzies in primo tomo actorum Societatis Linnæanæ, titulo *hirudinis*. In oceano pacifico
gene-

generatur fasciola clavata, et plerumque reperta est in ventriculo magni istius piscis qui *Scomber Pelamis* dicitur, quemque in maribus australibus non raro repertum nautæ fortasse melius norint nomine *Bo-neto*. Ostenditur in tabula vera magnitudo. Color fuscus est, non sine mistura quadam cærulei. Notandum est majus esse nostrum specimen quam quod descripsit Dominus Menzies, in actis Linnæanis.



THE CLAVATED FASCIOLA.



GENERIC CHARACTER.

Body in most species flattish, with a foramen at the head, and another at a considerable distance beneath,

SPECIFIC CHARACTER.

Roundish livid FASCIOLA; swelling into a clavated form behind,

The *Fasciola clavata*, by far the largest of its genus, and which appears to form as it were a kind of connecting link between the genera of *Fasciola*, *Hirudo*, and *Sipunculus*, seems to have been first described by Dr. Pallas, in his work entitled *Spicilegia Zoologica*. It has also been described by Mr. Menzies in the first volume of the transactions of the Linnæan Society. This animal is a native of the pacific ocean, and has been principally found in the stomach of the Scomber Pelamis or Boneto, a large fish not unfrequent in the southern latitudes. The plate represents it in its natural size. Its color is brown, with a cast of blueish. The specimen here figured is larger than that represented by Mr. Menzies in the Linnæan Transactions.

BALÆNA ROSTRATA.



CHARACTER GENERICUS.

Dentium loco in maxilla superiore laminæ corneæ.

Fistula respiratoria duplici orificio externo supra caput.

Lin. Syst. Nat. Gmel. p. 223.

CHARACTER SPECIFICUS, &c.

BALÆNA nigricans, rostro acuminato, ventre subargenteo-rosaceo cute longitudinaliter plicata.

BALÆNA ore rostrato, dorfi pinna adiposa.

Lin. Syst. Nat. Gmel. p. 226.

BALÆNA (rostrata) rostro longissimo et acutissimo,

Müll. zool. dan. prodr. p. 7. n. 48.

BALÆNA ore rostrato, &c.

Klein miss. pisc. 2. p. 13.

Congenerum minima est hæc species ; raro quippe pedes viginti quinque longa. Forma ei longe elegantior est quam balænis majoribus. Caput, dor-

B

sum

sum superius, pinnæ, caudaque sunt quasi cæruleo-
fusca; latera autem corporis venterque argenteo-
alba colore levissime carneo commista, fulcisque
numerosissimis profundis et parallelis, in longitudi-
nem oblique ductis, pulcherrime notata. Oculi
parvi. Rostrum longius quam reliquis ejusdem
generis.

Maria incolit septentrionalia Balæna rostrata, et
affinis est admodum Balænæ Boopi Linnæi, quæ
tamen multo major; longa scilicet interdum pedes
fere quinquaginta.



THE ROSTRATED WHALE.



GENERIC CHARACTER.

Teeth wanting, instead of which are situated horny laminæ in the upper jaw.

Fistula or spiracle double, on the top of the head.

SPECIFIC CHARACTER.

Blackish sharp-snouted WHALE, with silvery-white subrofaceous abdomen; the sides plaited longitudinally.

The Sharp-nosed WHALE.

The Small beaked WHALE.

This species may be considered as the least of its genus yet known; being rarely known to attain the length of twenty-five feet. In its general appearance it is much more elegant than the larger whales: the head, upper part of the back, fins, and tail, are of a dark or blueish-brown color; but the sides and abdomen are of a silvery white, with the slightest cast imaginable of flesh-color, and most beautifully striped in an obliquely longitudinal direction with
a vast

a vast number of deep, parallel furrows. The eyes are small, and the snout more elongated than in any other species of whale. It is a native of the northern seas, and is extremely nearly allied to the *Balæna Boops* of Linnæus, which however is far longer, having been found of near fifty feet in length.

TANAGRA VIOLACEA.



CHARACTER GENERICUS.

Rostrum conicum, acuminatum, emarginatum,
basi subtrigonum, apice declive.

Lin. Syst. Nat. p. 313.

CHARACTER SPECIFICUS, &c.

TANAGRA violacea, subtus flavissima.

Lin. Syst. Nat. p. 314.

TANAGRA Brasiliensis nigro-lutea.

Bris. 3. p. 31. t. 2. f. 2. 3.

PARUS aureus.

Edw. av. 2. p. 112. t. 263. f. 1.

Tanagra violacea, quam plene describit character specificus, in America Australi innascitur, in Cayana præcipue conspecta. Tabula illam magnitudine naturali depictam ostendit.

THE
VIOLACEOUS TANAGER.



GENERIC CHARACTER.

Bill conic, sharp-pointed, sloping at the tip and slightly emarginated; somewhat trigonal towards the base.

SPECIFIC CHARACTER, &c.

Violet-coloured TANAGER, deep-yellow beneath.

The Violet TANAGER.

The Golden TITMOUSE.

The Golden TANAGER.

The *Tanagra violacea*, which is sufficiently described in its specific character, is a native of South America, and is principally found in Cayenne. The plate represents it in its natural size.



TESTUDO GEOMETRICA.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, testa obtectum.
Os mandibulis nudis, edentulis.

CHARACTER SPECIFICUS, &c.

TESTUDO testa ovata, scutellis elevatis nigricantibus flavo radiatis supra planis.

TESTUDO scutellis testæ ovatæ omnibus elevatis superne planis, striis flavis velut e centro stellatim concurrentibus.

Schneider Schildkr. p. 352.

Lin. Syst. Nat. Gmel. p. 1044.

TESTUDO pedibus posticis palmatis, testæ scutellis elevatis truncatis.

Lin. Syst. Nat. ed. xii. p. 353.

TESTUDO tessellata minor.

Raj. quadr. 259.

TESTUDO terrestris Brasiliensis.

Seb. Mus. 1. p. 129. t. 80. f. 3.

A reliquis congeneribus facillime dignosci possit
Testudo geometrica, quod testam habeat virgatam,

cujus singulum scutum radiis ornatur flavis sex, octo,
aut etiam pluribus, a centro ad marginem porrectis.
In variis Asiæ et Americæ plagis innascitur, et ad
pedalem crescit longitudinem.



R. N.

THE
RADIATED TORTOISE.



GENERIC CHARACTER.

Body four-footed, tailed, covered with a shell.

Mouth with bony mandibles without teeth.

SPECIFIC CHARACTER, &c.

Oval TORTOISE, with blackish elevated scutellæ radiated with yellow and flat at the top.

The radiated LAND-TORTOISE.

The geometrical TORTOISE.

The *Testudo geometrica* is readily distinguished by the striped appearance of its shell, every scutum or division of which is marked by six, eight, or more yellow radii proceeding from the centre to the border. It is found in many parts of Asia and America, and grows to the length of a foot.

GYMNOTHORAX CATENATUS.



CHARACTER GENERICUS.

Corpus teretiufculum, lubricum; sine pinnis pectoralibus.

Spiraculum utrinque simplex, parvum, ovatum, nudum.

Os dentibus numerosis, acutis.

Nares tubulosæ.

CHARACTER SPECIFICUS, &c.

GYMNOTHORAX fuscus, rivulis albis variatus.

GYMNOTHORAX Catenatus.

Bloch. 12. p. 84. t. 415.

MURÆNA, feu Conger Brasiliensis.

Seb. Mus. 2. p. 72. t. 69. f. 3. 4.

Genus *Gymnothorax*, quod primus instituit Dominus Bloch, in hoc tantum differt a genere *Muræna*, quod careat pinnis pectoralibus. Generis nequaquam numerosi speciem præcipuam depinximus, quæ in sesquipedalem crescens longitudinem in maribus Americanis innutritur.



ARANEA DIADEMA.



CHARACTER GENERICUS.

Pedes octo.

Oculi octo.

Os unguibus, seu retinaculis duobus.

Palpi duo articulati; masculis genitalibus capitati.

Anus papillis textoriis.

Lin. Syst. Nat. p. 1030.

CHARACTER SPECIFICUS, &c.

ARANEA fusco-rufescens, abdomine supra maculis albis cruciatim guttato.

ARANEA abdomine subglobofo rubro-fusco, cruce albo-punctata.

Lin. Syst. Nat. p. 1030.

ARANEA crucigera.

Degeer. inf. 7. p. 218. t. 11. f. 3.

Mouff. inf. 233. f. 1.

List. aran. f. 2.

Frisch inf. 7. t. 4.

Roes. inf. 4. p. 421. t. 35, &c.

De araneorum forma modoque vivendi, quæ satis nota, supervacaneum est differere; ad alia igitur properabo de quibus plerumque nescitur.

In

In araneorum extremo abdomine sitæ sunt papillæ (ut plurimum quinque) per quas filum ducitur, cumque singula papilla multicava sit et foraminosa, quod vulgo filum simplex et unicum censetur e multis distinctisque fibris constare necesse est, vel pluribus vel paucioribus ad araneæ arbitrium; quæ si de omnibus foraminibus stamen simul contexeret, duceretur fortasse linea e mille diversis filamentis sibi invicem parallelis confecta. Posse quoque araneas volare etiamnum fortasse non omnibus notum; quod tamen præcipue faciunt juniores; adultæ rarius. Audent, ut plurimum, autumnno aera primum tentare, implentque fere innumera illa telarum copia quas ea tempestate cernere est huc illuc fluitantes. Ad volandum se parant editum aliquem locum scandendo, summum nempe murum, seu arboris rami, et obverso ad ventum capite, nec non emissis magna vi plurimis filis e papillis quæ sunt in abdomine, cælum periclitantur, longèque supra turres excelsissimas purum per inane gaudentes vehuntur. Verisimile est eas muscas aliaque insecta parvula inter volandum captare, quibus satiatae ad terram descendunt, membra scilicet contrahendo, gradatimque e filis expediendo. Mirum hoc in araneorum historia primus vulgavit Dominus Hulse annum circiter millesimum sexcentesium sexagesimum octavum, quod a Listero et Raio cito comprobatum. Plurima de hac re accuratissime observavit Dominus Listerus, qui in ædes altissimas conscendit, unde araneas vidit in auras assurgentes, donec ultra oculorum aciem se surripuissent. Vide sis Actorum Philo-

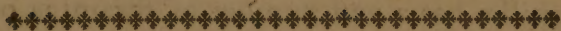
Philosophicorum numerum quinquagesimum, paginam millesimam decimam quartam.

Aranea Diadema non solum e maximis est sed et pulcherrimis quæ in Britannia generantur. In arboribus præcipue conspicitur sub finem æstatis. Coloribus variat; plerumque plus minus fusca, interdum autem fere rufa aut ferruginea; corpore tamen superiori serie macularum quasi gemmeo-albarum semper notato, ut cernere est in tabula.

Piaculum fere foret, si silentio præterirem figuras eximias, quibus adornavit Dominus Martynus novam editionem Historiæ Aranearum Clerkii et Albini opera contextæ.



THE DIADEM SPIDER.



GENERIC CHARACTER.

Eight *Legs*.

Eight *Eyes*.

Mouth furnished with two hooks or holders.

Two jointed *Palpi* or *Feelers*, the tips of which
(in the males) distinguish the sex.

Abdomen terminated by papillæ or teats, through
which the insect draws its thread.

SPECIFIC CHARACTER, &c.

Reddish-brown SPIDER, with the abdomen
marked with drop-shaped white spots in the
form of a cross.

Crown SPIDER.

Martyn's Clerk. p. 10. pl. 2. fig. 5.

Martyn's Albin. p. 26. pl. 14. fig. 8?

p. 30. pl. 16. fig. 9. 10.

fig. in tab. frontisp. &c.

The general form and manners of Spiders are too
well known to require description: there are how-
ever some particulars relative to these insects which
are not so commonly understood.

Spiders

Spiders at the tip of their abdomen are furnished with a certain number of papillæ, generally five, through which their thread is drawn; and as each of these papillæ has a vast number of foramina or outlets, it follows that what we commonly term a spider's thread is in reality formed of a collection of several distinct filaments; the animal possessing the power of throwing out more or fewer threads at pleasure: and if it should ejaculate from all the foramina at once, the thread might perhaps consist of some hundreds of distinct filaments. Another circumstance relative to Spiders, and which is even yet by no means generally known, is their power of flight. This is chiefly exercised by those of less advanced age, and seems possessed in but an inferior degree by those which are full grown. It is principally in the autumnal season that these diminutive adventurers ascend the air, and contribute to fill it with that infinity of floating cobwebs which are so peculiarly conspicuous at that period of the year. When inclined to make these aerial excursions the spider ascends some slight eminence, as the top of a wall, or the branch of a tree, and turning itself with its head towards the wind, ejaculates with great force from the papillæ of its abdomen several threads, and rising from its station commits itself to the gale, and is thus carried far beyond the height of the loftiest towers, and enjoys the pleasure of a clearer atmosphere. During their flight it is probable that spiders employ themselves in catching such minute winged insects as may happen to occur in their progress; and when satisfied with their journey,

and

and prey, they suffer themselves to fall, by contracting their limbs, and gradually disengaging themselves from the thread which supports them. This curious particular in the history of spiders was first observed by Dr. Hulse, about the year 1668, and was soon confirmed by Dr. Lister and Mr. Ray. Dr. Lister made several very accurate observations on this subject, and even ascended some of the highest edifices on purpose to observe it, and saw spiders sailing as far as the eye could possibly reach above these, till at length they vanished from his view. (see Phil. Transf. No. 50. p. 1014.)

The *Aranea Diadema*, here figured, is one of the largest as well as the most elegant of the British species. It chiefly frequents trees, and is not uncommon towards the latter part of the summer. In color it varies; being sometimes of a very deep brown, at other times much more inclining to rufous or ferruginous; but is always marked on the upper part of the body with a series of white or pearl-coloured spots disposed in the peculiar form represented in the plate.

It would be unpardonable on this subject to omit mentioning the exquisite figures of these animals published by Mr. Martyn in his new and splendid edition of the *History of Spiders* by Clerk and Albin.

UPUPA EPOPS.



CHARACTER GENERICUS.

Rostrum arcuatum, convexum, subcompressum, obtusiusculum.

Lingua obtusa, integerrima, triquetra, brevissima.

Pedes ambulatorii.

Lin. Syst. Nat. p. 183.

CHARACTER SPECIFICUS, &c.

UPUPA castanea, alis albo nigroque fasciatis, cauda nigra fascia lunata alba.

UPUPA cristata variegata.

Lin. Syst. Nat. p. 183.

UPUPA.

Aldr. orn. 2. p. 702.

Will. orn. p. 100. tab. 24.

In reliqua Europa nec non in variis Orientis regionibus crebro conspecta, Angliam non nisi fortuito invisit *Upupa Epops*; cui eadem fere magnitudo ac turdo vulgari seu musico, quæque crista insignitur adeo eximia, ut ab aliis avibus Europæis primo visu facillime possit dignosci.

THE
HOOPOE.



GENERIC CHARACTER.

Bill bowed, convex, rather compressed, subobtuse.

Tongue obtuse, triangular, entire, very short.

Feet formed for walking.

SPECIFIC CHARACTER, &c.

Chestnut-coloured HOOPOE, with the wings
banded with black and white; the tail black
with a lunated white band.

The HOOPOE.

Will. orn. p. 145. *pl.* 24.

Penn. Brit. Zool. 1. p. 219.

pl. 29. (*edit. fol. pl.* 1).

La HUPE.

Buf. ois. 6. p. 439. *Pl. enl.* 52.

The Upupa Epops or Hoopoe, a bird by no means uncommon in other parts of Europe as well as in several of the Eastern regions, appears only as an accidental visitant, and even that but very rarely, in the island of Great Britain. It is nearly of the same size with the turdus musicus or common thrush, and is so remarkably distinguished by its elegant crest as to be readily known at first sight from every other European bird.



CYCLOPTERUS PAVONINUS.

VAR. CYCLOPTERI LUMPI.



CHARACTER GENERICUS.

Maxillæ dentibus acutis parvis armatæ.

Corpus breve, crassum, squamis nudum.

Membrana branchiostega radiis quatuor.

Pinnæ ventrales in orbiculum connatæ.

CHARACTER SPECIFICUS, &c.

CYCLOPTERUS corpore squamis ossibus angulato.

Lin. Syst. Nat. p. 414.

VARIETAS.

Cyclopterus argenteo-thalassinus, lateribus
subroseis, dorso cæruleo.

Piscis hujus descriptionem accuratam nec non iconem elegantem amicissime mecum communicavit vir, scientia naturali optime imbutus, Reverendus Hugo Davies de Aber prope Bonium in Cambria Boreali; qui in opere hoc nostro non ita pridem de Charadrio Himantopo luculente et sagaciter differuit.

GEORGIO SHAW, M. D.

Apud Museum Britannicum, Londini.

Domine,

Pisces qui dicitur *Cyclopterus Lumpus* Linnæi, *Lumpus Anglorum* Gefneri, *Lump Sucker* Pennanti, norunt omnium fere litorum Britannicorum accolæ nomine *Lump-Fish* (unde nomen ei triviale dedit Linnæus) sive *Sea-Owl*. Hujus colores Willoughbeius, Raius, Pennantus, omnesque Anglici scriptores aiunt esse constanter et perpetuo fuscus, et saturatim aurantios, seu fordide rubros; fusco nempe infici dorsum et caput; aurantio seu rubro, os, latera, abdomen, et pinnas. Longus est plerumque quindecim, interdum octodecim uncias. Specimen ad te misi captum prope Bangor, mense Julio, anno millesimo septingentesimo nonagesimo septimo, quod varietatem puto esse hujus piscis, ichthyologis omnibus Britannicis, quorum ad me notitia pervenit, prorsus intactam, quæque in erudito tuo Naturæ Vivario non immerito sibi locum vindicat. Varietatem dixi, quod nulla distinctio specifica apparet. Nam tuberculum quasi armatorum serie super lateribus ducta, situ pinnarum, et numero radiorum in utraque, nec non toto corpore minutis tuberculis aspero, respondet omnino *Cycloptero Lumpo* communi. Insignis autem et notabilis est colorum differentia. Dorsum læte cæruleum, carina ipsa seu summo saturatiore. Latera tinguntur phœniceo. Os, latera capitis, omnisque regio inferior usque ad caudam eleganter thalassina, genis, pinnis pectoralibus, partibusque
prope

prope caudam, argentei aliquid splendoris ostendentibus. Irides quoque argenteæ, pupilla nigra. Ob miram hanc pulchrorum colorum misturam, Kleinio visum est distinctam huic pisci speciem instituere, cui titulus "Oncotion dilute viridis et vivide coloribus pavoneis resplendens; dorso parum nigricante, pinnis viridibus, ad ambitum deauratis."

Putat celeberrimus Pallas juniores tantummodo Cyclopteros Lumpos splendidis hisce coloribus effulgere. Pace tamen tanti viri liceat mihi dicere rem se non semper ita habere. Specimen enim jam apud me est, vel minus varietate quam supra memoravi, cui color sobrie fuscus: et opinor pulchram et fulgidam nostram varietatem, (cujus specimen sex uncias longum, tres cum dimidio latum erat) ad communem piscis vulgaris magnitudinem non attingere.

At ut omittamus coloribus, quales sint, diutius immorari, notabit certe et mirabitur probe exercitatus physicus pinnae ventrales sub thorace conjunctas, in similitudinem quasi infundibuli, quæ vice funguntur sustentaculi.

Non esse piscem corpore agili et versatili ab ipso nomine Anglico, *Lump-Fish*, colligi possit. Cum igitur æstus maris fluctuumque violentiam inter natandum perferre minus valeat, indulget ei Natura machinam qua aquarum rabiem tolerare noverit et eludere, rupibus arte adeo adhærendo, ut a situ vix ac ne vix sine ipsa vitæ jactura possit avelli.

Sum,

Domine, &c. &c.

HUGO DAVIES.

THE
PAVONIAN CYCLOPTERUS.

A VARIETY OF THE LUMP-FISH.



GENERIC CHARACTER.

Body of a thick form, without scales.

Teeth small, sharp, and numerous.

Ventral fins united into an oval concavity, so as to form an instrument of adhesion.

SPECIFIC CHARACTER, &c.

Brown CYCLOPTERUS, (Lump-Fish) with the body angulated by rows of sharp-pointed bony tubercles.

VARIETY.

Silvery-sea-green Lump-Fish, with the sides subrosaceous and the back blue.

For the following accurate description, accompanied by an elegant figure, of this remarkable fish, I am indebted to the Reverend Mr. Hugh Davies, of Aber near Bangor in North Wales, whose excellent remarks on the Charadrius Himantopus or Long-legged Plover have appeared in a former number of the present work.

To



To Dr. SHAW,

British Museum, London.

Dear Sir,

The *Cyclopterus Lumpus* of Linnæus, *Lumpus Anglorum* of Gefner, *Lump Sucker* of Mr. Pennant, is a fish known along most parts of the sea coast of Britain, by the name of the Lump-Fish, or Sea-Owl; from the former Linnæus has given it his trivial name.

This fish, Willoughby, Ray, Pennant, and every English writer describe, in respect of color, invariably of a dusky brown and deep orange, or dull red; the former color prevails along the back and head, the latter occupies the mouth, sides, belly, and fins; it is commonly found from fifteen to eighteen inches in length.

The fish here introduced (which was taken near Bangor in Carnarvonshire, July 1797,) seems to be a variety of the above species, that has hitherto escaped the notice of every English ichthyologist I have seen, and therefore requests admittance into your edifying Miscellany. I style it a variety, as it affords no specific distinction, for it accords with that in every particular, respecting the series of armed tubercles along the sides, the situation of the fins, and the number of rays in each, and roughness of the whole from minute excrescences: But it surely claims notice for its particular difference in colors; the back is of a fine azure, deepening towards the ridge: the sides are tinged with crimson; the mouth, sides of the head, and all the under
parts

parts to the tail, are of a delicate sea-green, with a silvery tinge on the cheeks, the pectoral fins, and the part of the body next the tail: the iris is likewise silvery, the pupil black: the fins and tail terminate in a fine pale yellow. Such is the wonderfully brilliant variety of colors in this fish! This induced Klein to constitute a species of it, in his *Hist. Pisc. Miss. IV. n. 3. t. 14. f. 5.* under the title of *Oncotion dilute viridis et vivide coloribus pavoneis resplendens; dorso parum nigricante, pinnis viridibus, ad ambitum deauratis.* It is the opinion of the celebrated Dr. Pallas, that this fish exhibits this variety of splendid colors, in its younger state only; *Juniores Lumpi dodrantalis plus minus longitudinis, vivi pulcherrimis coloribus gloriantur. Spic. Zool. VII.* But, with all deference to so respectable a name, I must remark, that this observation does not hold good, universally at least, as I have by me a specimen smaller than this of a sedate brown color; I am rather inclined to suppose, that this variety does not attain the size of the more common one: this specimen was about six inches long, and three and a half broad.

In what garb soever this singular fish may appear, the union of the two ventral fins beneath the thorax, in the form of the mouth of a funnel, and the use of it as a sucker, to the animal, must attract the particular notice of the attentive naturalist: as the English name implies, it is not formed for an active life, and is but ill calculated to contend with the strength of tides, and violence of waves. Providence has therefore supplied it with the means of eluding the force of the boisterous element which it inhabits;

for

for by the application of the instrument formed by the coalition of the ventral fins, it has the power of fixing itself so firmly to a rock, as scarcely to be moved by a force less than what would destroy it.

I am,

Dear Sir,

With much regard,

Your sincere humble Servant,

HUGH DAVIES,

*Aber near Bangor,
North Wales,*

July 15th, 1797.

NEREIS LAMELLIGERA.



CHARACTER GENERICUS.

Corpus repens longum.

Pedunculi laterales penicillati.

Tentacula simplicia, rarius nulla.

Oculi quatuor aut duo, rarius nulli.

Lin. Syst. Nat. Gmel. p. 3115.

CHARACTER SPECIFICUS, &c.

NEREIS depressiuscula subfusca, lateribus inter pedunculos squamatis.

NEREIS teres utrinque attenuata; proboscide mucronibus quatuor carneis stellata, pedunculis compressis folio supra semilunato subtus majore femicordato auctis.

Lin. Syst. Nat. Gmel. p. 3120.

Pall. nov. act. Petrop. 2. p. 233.

Speciem hanc raram et notabilem primus descripsisse videtur Dominus Pallas in opere cui titulus Nova Acta Petropolitana. Maria incolit Indica, et more reliqui generis, vermiculos, et testacea minora prædatur. Eximium nobis suppeditavit specimen celeberrimi Joannis Hunteri Museum, unde depicta est Nereis lamelligera juxta naturalem magnitudinem.

THE LAMELLATED NEREIS.



GENERIC CHARACTER.

Body repent, long ; in habit resembling a Scolopendra.

Feet or pedunculi very numerous on each side,

Tentacula simple, (in some few species none.)

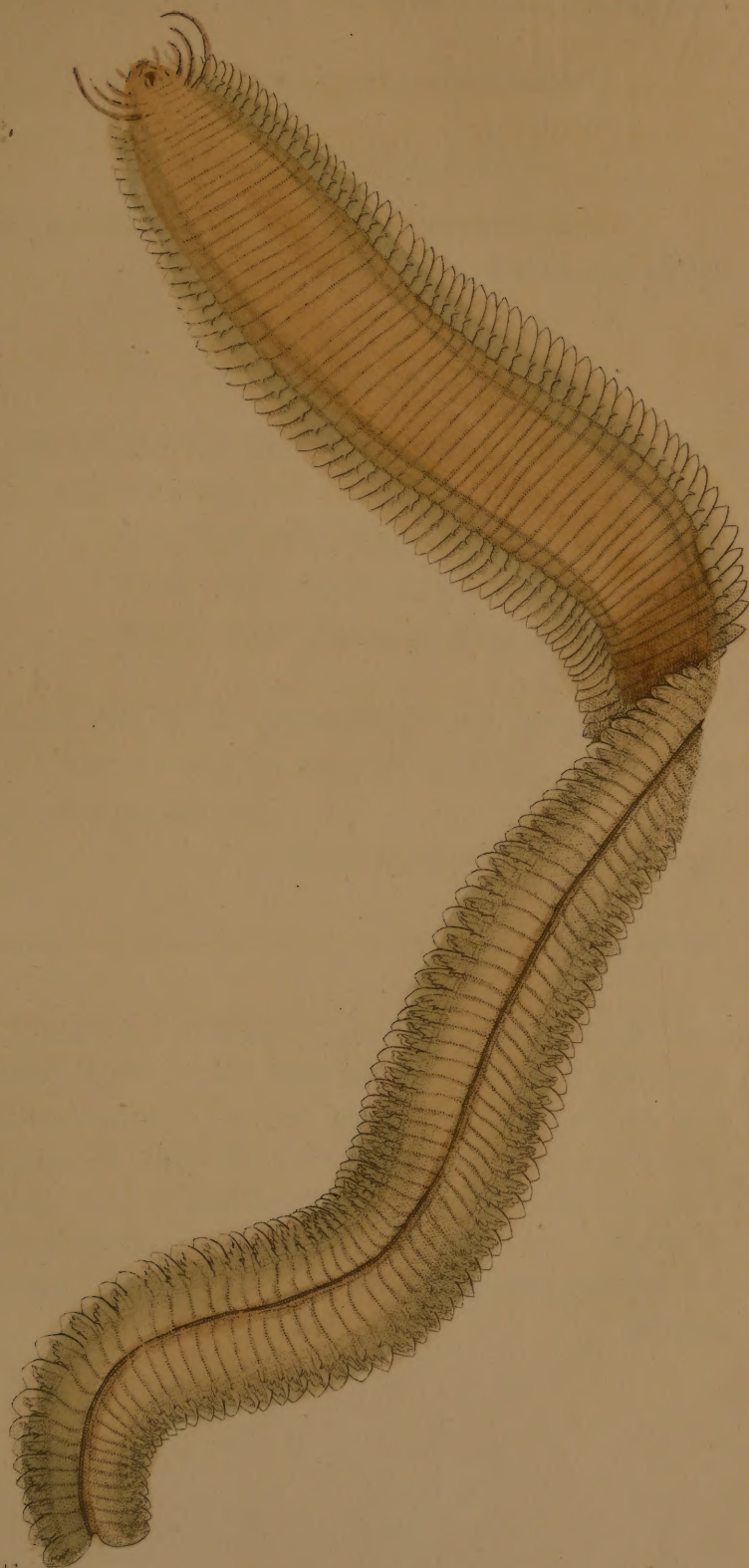
Eyes two or four, (in some few species none.)

SPECIFIC CHARACTER, &c.

Flattish brown NEREIS, with the sides furnished with a large double lamella or scale between each foot.

The scaly-sided NEREIS.

This rare and curious species appears to have been first described by Dr. Pallas in the work entitled *Nova Acta Petropolitana*. It is a native of the Indian seas, and like the rest of the genus, is supposed to feed on the smaller worms, shell-fish, &c. The figure here represented is taken from an uncommonly fine specimen in the Museum of the late Mr. John Hunter, and shews the animal in its natural size.



VORTICELLA CONVALLARIA.



CHARACTER GENERICUS.

Corpus contractile nudum ciliis rotatoriis.

Lin. Syst. Nat. Gmel. p. 3874.

CHARACTER SPECIFICUS, &c.

VORTICELLA simplex campanulata, pendunculo retortili.

Lin. Syst. Nat. Gmel. p. 3877.

Mull. Hist. Verm. 1. p. 118. n. 129.

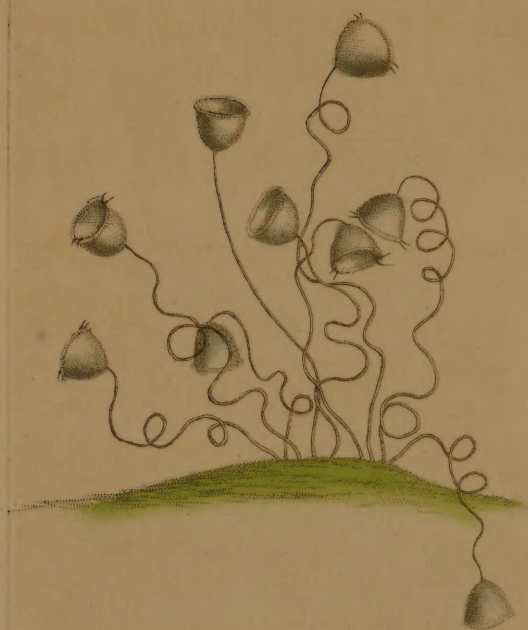
Mull. Anim. infus. p. 315. t. 44. f. 16.

BRACHIONUS (campanulatus) gregarius, pedunculo fetaceo retortili unifloro, corpusculo campaniformi.

Pall. el. zooph. p. 97. n. 54.

Genus hoc mirum et pulchrum non ita pridem descripsimus, cum scilicet de Vorticella polypina differebamus. De hac igitur specie, qua vix alia elegantior, fatis fit dicere nasci eam in aquis dulcibus, et in lemnæ nec non aliarum plantarum aquatiliū fibris culmisque sæpiissime reperiri. Movetur raptim, subito, et subsultim, stipitem nempe seu corpus

corpus quasi convulsum citissime in spiram contrahendo, gradatimque in pristinam longitudinem explicando. Cum singuli polypi non abfimilis sit forma generalis flori Convallariæ Majalis, nomen inde triviale a Linnæo datum est.



THE CONVALLARIAN VORTICELLA.



GENERIC CHARACTER.

Body contractile, naked ; furnished with rotatory organs.

SPECIFIC CHARACTER, &c.

Simple bell-shaped VORTICELLA with retortile stem.

The bell-shaped VORTICELLA.

A general description of this very curious as well as beautiful genus has been given in the present work under the article of *Vorticella polypina*. It is therefore only necessary to say that the present species is a native of fresh waters, and is frequently found on the stalks of *Lemna* or Duckweed, as well as on those of various other aquatic plants, and is one of the most elegant of the whole tribe. It is remarkable for the very sudden and starting manner in which it performs its motions ; contracting its stem rapidly, and in a kind of convulsive manner, into a spiral form, and gradually extending it to its former length.

length. The general shape of each individual animal is not unlike the flower of the *Convallaria Majalis* or Lily of the Valley, from which circumstance its Linnæan trivial name is taken.

CORVUS CRISTATUS.



CHARACTER GENERICUS.

Rostrum convexum, cultratum.

Nares pennis fetaceis recumbentibus obtectæ.

Lingua cartilaginea, bifida.

Pedes ambulatorii.

Lin. Syst. Nat. p. 155.

CHARACTER SPECIFICUS, &c.

CORVUS tectricibus alarum lineis transversis nigris ; corpore cæruleo, collari nigro.

Lin. Syst. Nat. p. 157.

GARRULUS Canadensis cæruleus.

Bris. 2. p. 55. n. 4.

Corvus cristatus eadem quasi magnitudine atque indole qua corvus nostras glandarius, corpore tamen graciliori, in variis Americæ septentrionalis partibus conspici possit. Fœmina fere mari concolor, paulo minus splendida est. Specimen pulcherrimum unde hæc nostra figura depicta est in Museo Leveriano asservatur.

THE
BLUE JAY.



GENERIC CHARACTER.

Bill convex, cultrated.

Nostrils covered by setaceous recumbent feathers.

Tongue cartilaginous, bifid.

Feet formed for walking.

SPECIFIC CHARACTER.

Crested blue JAY, with black collar; the wings
and tail barred with black.

The BLUE JAY.

Catesb. Car. 1. p. 15. *pl.* 15.

Edwards pl. 239. *f.* 1.

Le GEAI bleu de d'Amérique Septentrionale.

Buf. ois. 3: p. 120. *Pl. enl.* 529.

This species, which approaches nearly in size to the common or European Jay, but is of a more slender form, is a native of various parts of North America. In manners it resembles the common Jay. The female is nearly similar to the male in point of colors, but is somewhat less brilliant. The figure here represented is from a beautiful specimen in the Leverian Museum.



CANCER STRIGOSUS.



CHARACTER GENERICUS.

Pedes octo (rarius sex aut decem); insuper manus
duæ chelatæ.

Palpi sex inæquales.

Oculi duo distantes, plurimis pedunculati; elongati, mobiles.

Mandibula cornea, crassa.

Labium triplex.

Cauda articulata, inermis.

Lin. Syst. Nat. Gmel. p. 2963.

CHARACTER SPECIFICUS, &c.

CANCER macrourus, thorace antrorsum rugoso
spinis ciliato, rostro acuto septemdentato.

Lin. Syst. Nat. p. 1052.

CANCER macrourus thorace chelifque angulatis
hispidis.

Lin. Mus. Ad. Fr. 87.

ASTACUS strigosus.

Degeer. inf. 7. p. 393. n. 2. t. 23. f. 1.

Cancro brachiato, quem in hoc opere dudum depinximus, affinis admodum cancer strigosus brachia

gerit breviora, majoribus et fortioribus aculeis armata. Habet quoque strias insigniores per thoracem et corpus transverse ductas. Speciem hanc Europæ partes septentrionales incolentem magnitudine naturali ostendit tabula.



THE PLATED LOBSTER.



GENERIC CHARACTER.

Legs generally eight (in some species six or ten.)

Feelers six, unequal.

Eyes two, generally distant, footstalked, moveable.

Tail articulated, unarmed.

SPECIFIC CHARACTER, &c.

Elongated CANCER, with the thorax plated or imbricated forwards with ciliated wrinkles: the snout sharp, with seven denticles.

Plated LOBSTER.

Penn. Brit. Zool. 4. p. 15. *t.* 14. *f.* 26.

This species is very nearly allied to the Cancer brachiatus, before figured in the present work; but the arms are not so long in proportion, and are much more strongly aculeated: the thorax also and body are more remarkably striated in a transverse direction. This species is a native of the northern parts of Europe, and is represented in its natural size.

MYTILUS ROSTRUM.



CHARACTER GENERICUS.

Animal Ascidia?

Testa bivalvis, rudis, sæpius affixa bysso, ut plurimum crassiori.

Cardo (in plurimis) edentulus, distinctus, (paucis exceptis) linea subulata excavata longitudinali.

Lin. Syst. Nat. Gmel. p. 3350.

CHARACTER SPECIFICUS, &c.

MYTILUS testa oblonga, tenui, virescente, subtruncata, natibus acuminatis carinatis, valvis hiantibus.

PATELLA testa integerrima, oblonga, margine antico retusa, vertice mucronato carinato.

Lin. Syst. Nat. p. 1260.

CONCHA LUZONICA tubularis virescens.

Petiv. gaz. t. 32. f. 9.

Quam quasi univalvem Patellis annumerarunt Linnæus et alii physici, quæque in Systemate Naturæ quod auctius edidit Gmelinius, in eodem genere

nere jam nunc reponitur, revera Mytili species habenda est concha de qua differere pergimus. Insigne tamen est valvulas, quæ inter se simillimæ sunt, non penitus claudi, sed cum vel proxime ad se invicem appropinquant, hiare extremitates: quæ in re similitudo est huic testæ cum iis quæ in genere *Solenis* continentur. Species rarissima est *Mytilus* Rostrum, circa Amboynæ et insularum Philippen-sium litora ut plurimum repertus. Substantia est tenui et delicata, præcipue versus latera et extremitates; medio paulum densiore. Color subalbet, non sine mistura quadam viriditatis, in diversis speciminibus magis minusve saturatæ, præsertim in extremitatibus et lateribus. Extremitates superiores admodum acuminatæ prominent quasi in carinam. Iconas, externam et internam testæ faciem ostendentes, suppeditarunt pulcherrima specimina quæ in Museo Britannico asservantur.

SCARABÆUS MONOCEROS.

CHARACTER SPECIFICUS, &c.

SCARABÆUS exscutellatus niger, thorace truncato-declivi violaceo, elytris striatis, capitis cornu suberecto angulato.

SCARABÆUS violaceus.

Voet. scar. p. 36. t. 23. f. 1. 2.

SCARABÆUS Lancifer.

Fablonsky Kæff. t. 15. f. 1.

SCARABÆUS violaceus, thorace dentato, capitis cornu angulato, elytris fulcatis.

Lin. Syst. Nat. Gmel. p. 1536.

Affinis admodum Scarabæo Cyaneo; differt tamen cornu capitis insigni: fertur quoque insectum esse Africanum.

THE
UNICORN BEETLE.

SPECIFIC CHARACTER, &c.

Non-scutellated black SCARABÆUS, with abruptly-sloping violet-coloured thorax, striated wing-sheaths, and suberect angular horn.

The Violet-Breasted horned BEETLE.

The Unicorn BEETLE.

This species is extremely nearly allied to the Scarabæus cyaneus, but is strikingly distinguished by its remarkable horn: it is also said to be a native of Africa.

THE DUCK'S-BILL MUSCLE.



GENERIC CHARACTER.

Animal allied to an Ascidia.

Shell bivalve, in some species fastened by a kind of filk or byssus.

Hinge in most species without tooth.

SPECIFIC CHARACTER, &c.

MUSCLE with oblong, thin, greenish, truncated shell, with the beaks or upper ends sharp and carinated: the valves gaping at the ends.

The DUCK'S BILL.

This shell, which was formerly placed by Linnæus and others in the genus *Patella*, and consequently regarded as an univalve, and which in the enlarged edition of the *Systema Naturæ* by Dr. Gmelin still continues in the above-mentioned genus, is in reality a species of *Mytilus*: it is remarkable however that the two valves, which are exactly similar to each other, do not close entirely, but on the contrary exhibit in their approximated state a considerable vacuity at each extremity; being allied
in

in this respect to the shells of the genus Solen. . The Mytilus Rostrum is an extremely rare species, and is found about the coasts of Amboina and the Philippine islands. The substance of the shell is thin and delicate towards the ends and sides, but somewhat stronger or thicker in the middle. The color is whitish, with a cast of green, more or less strong in different individuals, on the sides and tips: the upper ends are very sharp, and form a prominent carina on that part of the shell. The figures on the present plate, exhibiting both surfaces of the shell, are taken from specimens in the British Museum.

MYTILUS CAMELLII.



CHARACTER SPECIFICUS, &c.

MYTILUS testa oblonga, tenui, virescente, subtruncata, natibus acuminatis carinatis, valvis clausis.

CONCHA caudata, &c.

Camellii delin. rer. nat. tom. 4.

Mus. Brit.

In omnibus convenire videtur hæc species Mytilo Rostro, nisi quod alarum arcte clausarum non hient extremitates. In Japonia generatur Mytilus Camellii, et in Museo Britannico figuræ quædam sunt archetypæ quas ipse Camellus delineavit. Vidi quoque interdum hunc Mytilum in chartis Sinensibus depictum. Iconas autem quas ostendit tabula nostra, non modo testas sed animal incolens exhibentes debemus ipsis speciminibus, quæ spiritu vini condita in Museo reponuntur Britannico.

THE CAMELLIAN MUSCLE.



SPECIFIC CHARACTER, &c.

MUSCLE with oblong, thin, greenish, truncated shell, the beaks sharp and carinated; the shells completely closing.

The Close DUCK'S-BILL.

This species seems to agree in every respect with the *Mytilus Rostrum*, except that the valves shut very exactly, without leaving any hiatus at either end as in that shell. It is a native of Japan, and is represented in some original drawings of Camelli (Kamel) in the British Museum: I have also observed this species in Chinese drawings. The figures here represented, shewing not only the shell but likewise the inhabiting animal, are from specimens finely preserved in spirits in the British Museum.



SCARABÆUS CYANEUS.

CHARACTER GENERICUS.

Antennæ clavatæ capitulo fissili.

Tibiæ anticæ sæpius dentatæ.

Lin. Syst. Nat. p. 541.

CHARACTER SPECIFICUS, &c.

SCARABÆUS exscutellatus niger, thorace truncato-declivi cyaneo, elytris striatis.

COPRIS Capito.

Voet. Scar. p. 45. t. 27. fig. 38.

SCARABÆUS Hamadryas.

Fablonsky Kæff. 2. t. 8. fig. 6.

SC. Hamadryas.

SCARABÆUS thorace tricorni; intermedio plano acuto tridentato, clypeo reflexo bicorni.

Lin. Syst. Nat. Gmel. p. 1534.

Carent, ut plurimum, scarabæi majores tum formæ tum colorum pulchritudine. Excipiamus tamen necesse est speciem de qua jam agitur, quæ
rudis

rudis et monstrosa colore compensatur eleganti ad-
modum et venusto, cæruleo nempe violaceo per
totam anteriorem partem seu primam insecti divi-
sionem læte diffuso: qui tamen in variis specimini-
bus plus minus nitet. In India? innascitur scara-
bæus cyaneus.



THE CYANEAN BEETLE.

GENERIC CHARACTER.

Antennæ divided at the tip into lamellæ.

Tibiæ (or second joints of the fore-legs) generally toothed.

SPECIFIC CHARACTER, &c.

Non-scutellated black SCARABÆUS, with abruptly-floping blue thorax, and striated wing-sheaths.

The Blue-Breasted BEETLE.

The larger Scarabæi in general are far less remarkable for beauty of color than for singularity of shape. The present species however is an exception to this rule, and with a form the most uncouth exhibits a highly elegant and beautiful color; the whole anterior part or division of the insect being of the richest violaceous blue: which however in some specimens is less strikingly conspicuous than in others. This species is a native of India?

ALCEDO ERITHACA.



CHARACTER GENERICUS.

Rostrum trigonum, crassum, rectum, longum.

Lingua carnosæ, brevissima, plana, acuta.

Pedes gressorii (plerisque).

CHARACTER SPECIFICUS, &c.

ALCEDO brachyura, dorso cæruleo, abdomine luteo, capite uropygioque purpureis, gula nuchaque albis.

Lin. Syst. Nat. p. 179.

ISPIDA Bengalensis torquata.

Bris. 4. p. 503.

Var. Alcedo cærulea, subtus flavescens, gula alba, capite cerviceque rubris, uropygio purpureo.

Alcedinum generi mira, ut plurimum, et quasi gemmea est pennarum pulchritudo: at cum hac quam describimus paucæ species comparari possint, five colorum elegantiam sigillatim examinemus, five lautam simul omnium intueamur varietatem. Indiam incolit Alcedo erithaca, et depingitur in tabula naturalis avis magnitudo.



THE
RED-HEADED KINGFISHER.



GENERIC CHARACTER.

Bill trigonal, thick, straight, long, sharp-pointed.

Tongue fleshy, very short, flat, sharp-pointed.

Feet (in most species) grefforial.

SPECIFIC CHARACTER, &c.

Short-tailed KINGFISHER, with the back blue,
the abdomen yellow, the head and rump
purple, the throat and back of the neck white.

The Bengal KINGFISHER.

Red-Headed KINGFISHER.

Variety. KINGFISHER with the back blue,
the abdomen yellowish, the throat white, the
head and neck orange-red, the rump purple.

The genus *Alcedo* is in general eminently distinguished by a peculiar beauty and lustre of plumage. Few species however can be compared in this respect to that represented on the present plate, which, ex-

clufive of the elegance of its colours fingly considered, exhibits a greater variety of hues than any other of its tribe. It is a native of India, and is represented in its natural fize.

LACERTA VULGARIS.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, nudum.

Lin. Syst. Nat. p. 359.

CHARACTER SPECIFICUS, &c.

LACERTA fusco-flavescens, linea dorsali duplici fusca, abdomine croceo fusco maculato.

LACERTA cauda tereti mediocri, pedibus unguiculatis, palmis tetradactylis, dorso linea duplici fusca.

Lin. Syst. Nat. p. 370.

Lin. Syst. Nat. Gmel. p. 1076.

LACERTUS vulgaris terrestris ventre nigro maculato.

Raj. quadr. 264.

Terrestris omnino est lacerta vulgaris, specierum Britannicarum minima. Conspici plerumque possit in hortis, nec raro circa fimeta, aliaque id generis. Irrepat quoque interdum in cellas, more limacis communis. Linnæus in editione duodecima systematis naturæ credit eam, dum adhuc larva sit, esse aquaticam. Audacter tamen possum affirmare me non

non semel invenisse in locis siccissimis, et longe ab aqua remotis, specimina vix semiuncialia, quæ, magnitudine tantummodo excepta, animalibus adultis omni ex parte erant simillima. Magnitudo generalis in tabula ostenditur. Color corporis superioris est luteo-fuscus, linea duplici angusta dorsuali saturatiore; inferioris splendide aurantius.



THE
COMMON NEWT.

GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER, &c.

Yellowish-brown NEWT, with a double brown dorsal line, and orange-coloured abdomen, spotted with brown.

Brown LIZARD.

Pennant. Brit. Zool. 3. p. 23. pl. 2.

The common brown NEWT, or EFT.

This, which is the smallest of the British Lacertæ, is altogether a terrestrial species. It is commonly seen in gardens, and not unfrequently in the neighbourhood of dunghills, &c. it also occasionally makes its way into cellars, in the manner of the common slug. Linnæus, in the twelfth edition of the *Systema Naturæ*, seems to suppose it an inhabitant of the water during its young or larva state. I can however safely affirm that I have more than once met with specimens in perfectly dry situations, and at a distance from any waters, so extremely minute

as scarce to equal half an inch in length, and which yet appeared to differ in no respect except in magnitude from the full-grown animal. The general size is represented in the plate. Its color is a yellowish brown above, with a double, narrow dorsal line or streak of a deeper tinge; and below a bright orange.

SPHINX RUSTICA.



CHARACTER GENERICUS.

Antennæ subprismaticæ, utroque fine attenuatæ.

Lingua exserta (plerisque).

Palpi duo reflexi.

Alæ deflexæ.

Lin. Syst. Nat. Gmel. p. 2371.

CHARACTER SPECIFICUS, &c.

SPHINX (rustica) alis variegatis, puncto medio albo, abdomine ocellis trium parium fulvis.

Fab. spec. inf. 2. p. 145.

Lin. Syst. Nat. Gmel. p. 2385.

Cram. pap. 26. t. 300. f. A.

Mer. inf. Sur. t. 5.

In Surinamia innascitur Sphinx rustica, nec non in aliis Americæ Australis regionibus. Insectum perfectum ostendit tabula una cum larva et chrysalide. Memoravit et depinxit hanc speciem celeberrima Domina Merian. Larva Jatrophæ Manihot folia præcipue depascitur.



THE CASSAVA SPHINX.



GENERIC CHARACTER.

Antennæ subprismatic, attenuated at each extremity.

Tongue (generally) exerted.

Feelers two, reflex.

Wings deflected.

SPECIFIC CHARACTER.

SPHINX with the wings variegated with white, ash-colour and brown; a white speck on the middle of each upper wing, and three ocellated yellow spots on each side the abdomen.

The Cassava Sphinx is a native of Surinam as well as of some other parts of South America, and is represented in its natural size, together with its larva and chrysalis, on the annexed plate. This species is described and figured by the celebrated Madam Merian in her work on the Surinam Insects. The larva feeds principally on the leaves of the Cassava or *Jatropha Manihot* of Linnæus.

ANTIPATHES CUPRESSUS.



CHARACTER GENERICUS.

Animal crescens plautæ facie.

Stirps intus cornea, spinis exiguis obsita, basi explanata, extus carne gelatinosa, verrucis polypiferis obducta.

Soland. et Ellis Zooph. p. 97.

CHARACTER SPECIFICUS, &c.

ANTIPATHES simplex scabra paniculata, ramis recurvatis.

Soland. et Ellis Zooph. p. 103.

ANTIPATHES (cupressina) trunco simplici longissimo flexuoso, ramulis confertis recurvis ramosissimis paniculato.

Pall. el. Zooph. p. 213.

GORGONIA Abies, &c.

Lin. Syst. Nat. p. 1290.

CUPRESSUS marina.

Rumph. Amb. 6. p. 207. t. 80. f. 2.

ANTIPATHES Cupressus.

Lin. Syst. Nat. Gmel. p. 3796.

CUPRESSUS marina.

Seb. mus. 3. t. 106. f. 1.

Mirum hoc corallium magnitudine quasi bipedali
in oceano Indico generatur. Abraſo villo ſeu to-
mento fuſco quo obtegitur, omni ex parte videtur
nigerrimum. Subſtantia eſt fragili, exceptis ra-
mularum extremitatibus, quæ flexiles ſunt et quaſi
corneæ.



THE
CYPRESS ANTIPATHES.



GENERIC CHARACTER.

Animal growing in the form of a plant.

Stem expanded at the base, internally horny, beset with small spines: externally covered with a gelatinous flesh beset with numerous polype-bearing tubercles.

SPECIFIC CHARACTER, &c.

Simple rough paniculated ANTIPATHES with recurved branches.

Cypress ANTIPATHES.

Soland and Ellis Zooph. p. 103.

The CYPRESS Coral.

CYPRESS Gorgonia.

Fir GORAGONIA, or SEA-FIR.

This curious coral grows to the height of about two feet, and is a native of the Indian ocean. When the brownish villus or down, with which both the stem and branches are covered, is rubbed off, the whole

whole appears of a deep black colour. It is of a brittle substance, except towards the extremities of the ramifications, which are flexible, and of a kind of horny appearance.

PHASIANUS IGNITUS.



CHARACTER GENERICUS.

Rostrum breve, robustum.

Genæ cute nuda lævigata.

Pedes (plerisque) calcarati.

Lin. Syst. Nat. Gmel. p. 737.

CHARACTER SPECIFICUS, &c.

PHASIANUS niger, chalybeo-nitens, lateribus corporis rufis, dorso imo igneo-ferrugineo, rectricibus intermediis subfulvis.

Avem hanc non minus elegantia quam raritate insignem in Angliam intulerunt reversi a peracto ad Sinenfes itinere. In insula Java generari dicitur, et plenior ejus descriptio legi possit in libro Domini Stauntoni, qui de legatione differit jussu imperii Britannici suscepta. Cum cauda nonnihil mutilata sit, vix pro certo constat an revera iis phasianis annumeranda sit quibus cauda longa et lanceolata, an quibus breviuscula et rotundata sit. Affinis quodammodo videtur Phasianus ignitus Meleagridi cristatæ Linnæi, et magnitudine est quasi gallinæ communis.



THE FIRE-BACKED PHEASANT.

GENERIC CHARACTER.

Bill short and stout.

Cheeks more or less covered by a smooth naked skin.

Legs (in most species) furnished with spurs.

SPECIFIC CHARACTER, &c.

Black PHEASANT with a steel-blue gloss; the sides of the body rufous; the lower part of the back fiery-ferruginous; the two middle tail feathers yellowish-brown.

Fire-backed PHEASANT.

Staunton's Embassy to China. Vol. I.
p. 246. folio plate. No. 13.

This most elegant and rare bird, which was brought over during the late voyage from China, is said to be a native of the island of Java, and is more fully described in Sir George Staunton's account of the Embassy. Its size is that of a common fowl: the tail having been somewhat mutilated, it is not clear whether it should be placed amongst those pheasants which have that part long and lanceolate, or shortish

and rounded. It seems allied in some degree to the
bird called the crested Guan, or *Meleagris cristata*
of Linnæus.

GYMNOTHORAX? ZEBRA.

CHARACTER GENERICUS.

Corpus teretiufculum, lubricum ; sine pinnis pectoralibus.

Spiraculum utrinque simplex, parvum, ovatum, nudum.

Os dentibus numerosis, acutis.

Nares tubulosæ.

CHARACTER SPECIFICUS, &c.

GYMNOTHORAX? atrofuscus, fasciis transversis linearibus distantibus albis, subtus irregulariter concurrentibus.

SERPENS marina Surinamensis fœmina, Murænis valde affinis.

Seb. mus. 2. p. 73. t. 70. fig. 3.

Speciem hanc bipedalem, ut plurimum, seu tripedalem, in maribus Americanis generatam, a reliquis facillime discriminat colorum distincte et ordinatim dispositorum partitio: imo nempe colore eximie atro-fusco, fasciis albis angustis, longe a se invicem distantibus circumdato, quæ ad latera inferiora

feriora et sub ventrem huc illuc coeuntes spatia efficiunt interdum subtriangularia, interdum rotundata, seu velut ocellata. In museo celeberrimi Joannis Hunteri pulcherrimum exstat specimen, unde depicta est hæc nostra figura.



THE
ZEBRA GYMNOTHORAX.



GENERIC CHARACTER.

Body anguilliform ; without pectoral fins.

Spiracle single on each side, small, oval, uncovered.

Mouth armed with numerous, sharp teeth.

Nostrils tubular.

SPECIFIC CHARACTER, &c.

Blackish-brown GYMNOTHORAX, with transverse, linear, distant white bands meeting irregularly beneath.

The striped GYMNOTHORAX, or Zebra-Eel.

This species, which grows to the length of two or three feet, is a native of the American seas, and is readily distinguished by the perfectly distinct and regular distribution of its colors; the rich dark-brown, which constitutes the ground-color, being surrounded at considerable distances by narrow white bands, which on the lower part of the sides and
under

under the abdomen unite or anastomose here and there, so as to form subtriangular markings in some parts, and rounded or ocellated ones in others. A beautiful specimen of this animal occurs in the collection of Mr. John Hunter, from which the figure here represented was engraved.

MANTIS BISPINOSA.



CHARACTER GENERICUS.

Caput nutans, maxillosum, palpis instructum.

Antennæ fetacæ.

Alæ quatuor, convolutæ: inferiores plicatæ.

Thorax linearis, elongatus, angustatus.

Pedes gressorii.

CHARACTER SPECIFICUS, &c.

MANTIS linearis olivacea, thorace antèrius bispinoso, elytris brevissimis viridibus, alis roseis.

MANTIS (bispinosa) thorace teretiusculo antèrius bispinoso, elytris brevissimis: margine flavo.

Fab. sp. inf. 1. p. 346.

Lin. Syst. Nat. Gmel. p. 2054.

Americam incolit Mantis bispinosa, magnitudine naturali in tabula depicta.



THE
TWO-SPINED MANTIS.



GENERIC CHARACTER.

Head nutant, armed with jaws and furnished with palpi.

Antennæ setaceous.

Wings four; convolute; the lower ones plicated.

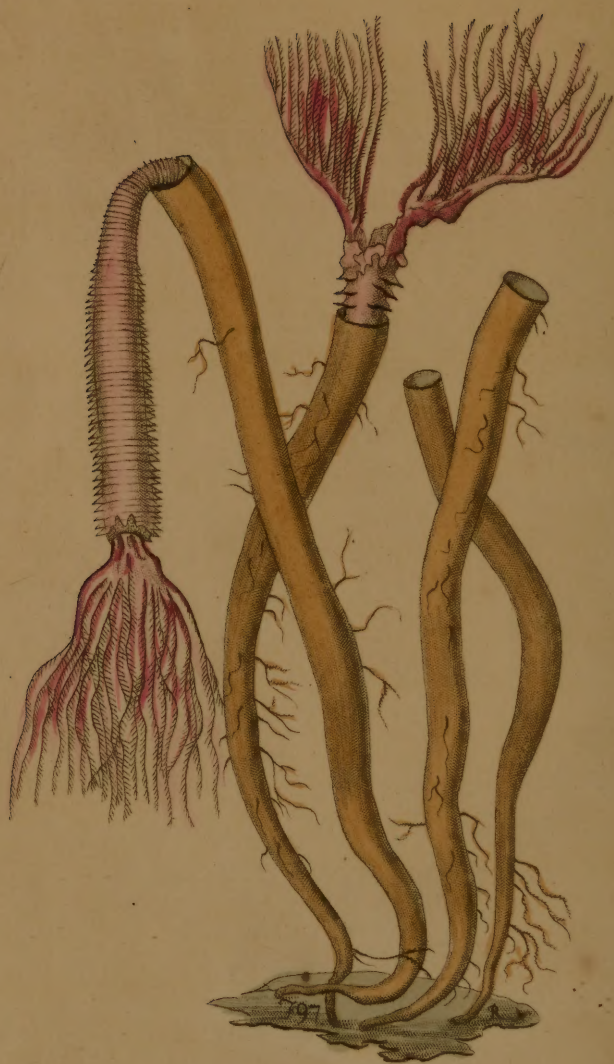
Thorax linear, elongated.

Feet formed for walking.

SPECIFIC CHARACTER.

Linear olivaceous MANTIS, with the thorax two-spined in front: the elytra green and very short; the wings rose-coloured.

The Mantis *bispinosa* is a native of America, and is represented on the plate in its natural size.



AMPHITRITE VENTILABRUM.



CHARACTER GENERICUS.

Corpus protensum in tubulo, annulatum.

Pedunculi verrucosi.

Tentacula acuminata, approximata, plumosa.

Oculi nulli.

Lin. Syst. Nat. Gmel. p. 3110.

CHARACTER SPECIFICUS, &c.

AMPHITRITE tentaculis utrinque fasciculatis,
latere interiore ciliatis.

AMPHITRITE corpore verrucoso, proboscide
nulla.

Lin. Syst. Nat. Gmel. p. 3111.

SABELLA Penicillus.

Lin. Syst. Nat. ed. XII. p. 1269.

CORALLINA tubularia melitenfis.

Ellis. corall. 92. t. 34.

TUBULARIA Penicillus.

O. Fab. Fn. groenl. p. 438. n. 449.

Animalibus quæ genus *Amphitrite* constituunt generalis quædam est similitudo cum scolopendris;
corpus

corpus quippe longum et complanatum, in annulos
numerofissimos divisum, e quorum singulo utrinque
exoritur tuber parvulum quasi pediforme. Tere-
bellis non longe dissimilis est formatio capitis, ore
utrinque tentaculis subdivisis, plumatis, instructo.
Tubos incolunt Amphitritæ, ut plurimum, flexiles
et quasi coriaceos. Littora amat Amphitrite Ven-
tilabrum maris mediterranei.

THE FAN AMPHITRITE.



GENERIC CHARACTER.

Body extended within a tube, annulated.

Feet very small, numerous.

Tentacula approximated, feather-form.

Eyes none.

SPECIFIC CHARACTER.

AMPHITRITE with fasciculated tentacula on each side; the fibres ciliated on their interior edges.

The animals of the genus Amphitrite bear a general resemblance to scolopendræ, having a long, flattened body, consisting of a great number of annuli or segments, with a correspondent number of small leg-like processes on each side. In the structure of the head or upper part they resemble Terebellæ, being furnished with a pair of sub-divided or plumy tentacula on each side the mouth. The tubes which they inhabit are commonly of a flexible and somewhat coriaceous substance. The Amphitrite Ventilabrum is principally found on the Mediterranean coasts.

RYNCHOPS NIGRA.



CHARACTER GENERICUS.

Rostrum rectum: mandibula superiore multum brevior; inferiore apice truncata.

Lin. Syst. Nat. p. 228.

CHARACTER SPECIFICUS, &c.

RYNCHOPS nigricans, subtus alba, rostro basi rubro.

Lin. Syst. Nat. p. 228.

PLOTUS rostro conico inæquali.

Klein av. 142.

AVIS novaculæ facie.

Raj. av. p. 194. n. 5. t. 1. f. 5.

RYGCHOPSALIA superne fusco-nigricans, inferne alba, &c. &c.

Brisson. av. 6. p. 223. t. 21. fig. 2.

Ab alia fere omni facile dignosci possit hæc avis, quod rostri mandibula superior vix ultra dimidiatam inferioris longitudinem excurrat, quodque, utrisque a latere compressis, immissaque acie superioris in cavum inferioris quod ei ex opposito respondet, ef-

H

ficiatur

ficiatur quasi forfex. Optime comparatur hæc rostri
conformatio ad modum vivendi quo utitur avis;
hujus enim ope, dum aquas pervolitat, pisciculos,
cancros, aliaque marina insecta facillime arripit.
Color generalis superior fusco-nigrat; interdum
etiam ferrugineo leviter commistus. Tota avis in-
ferior albet. Ducitur per alas in nonnullis specimi-
nibus alba fascia, cui concolores sunt rectricum ex-
tremitates. Novi orbis incola est Rynchops nigra,
amatque præcipue littora insularum Americanarum.
Magnitudo est quasi Lari vulgaris, seu ejus qui a
Linnæo *canus* dicitur.



THE BLACK SKIMMER.



GENERIC CHARACTER.

Bill strait: the upper mandible much shorter than the lower, which is truncated at the tip.

SPECIFIC CHARACTER, &c.

Blackish SKIMMER, white beneath, with the base of the bill red.

The CUT-WATER.

Catesb. Car. 1. p. 90. *t.* 90.

Le Bec-en-ciseaux.

Buf. ois. 8. p. 454. *pl.* 36. *Pl.*
enl. 357.

The singular structure of the beak sufficiently distinguishes this bird from almost every other: the upper mandible scarce reaching to much more than half the length of the lower one: both mandibles are also of a laterally-compressed shape; so as to form a kind of cutting instrument; the sharp edge of the upper fitting into the corresponding cavity of

the lower. This structure of the beak is finely adapted for its mode of life; since while skimming over the surface of the water, it by this means readily obtains the smaller fish, as well as cancri and other marine insects on which it feeds. The general color of this bird is a deep brownish-black above, accompanied sometimes with a cast of ferruginous; and beneath entirely white: a bar of white also in some individuals runs across each wing, and the tips of the tail-feathers are of the same color. This bird is a native of the new world, and is principally seen about the coasts of the American islands. Its size is that of the *Larus canus* of Linnæus or Common Gull.

ALCYONIUM DIGITATUM.

CHARACTER GENERICUS.

Animal (plerumque) plantæ forma crescens.

Stirps fixa, carnosæ, gelatinosæ, spongiosæ, vel coriaceæ, *osculis polypiferis* obsita.

CHARACTER SPECIFICUS, &c.

ALCYONIUM acaule carnofo-spongiosum lobatum pallidum, osculis stellatis undique notatum.

ALCYONIUM albidum carnofo-spongiosum lobatum, osculis stellatis undique notatum.

Soland. et Ellis zooph. p. 175. n. 1.

ALCYONIUM manus marina.

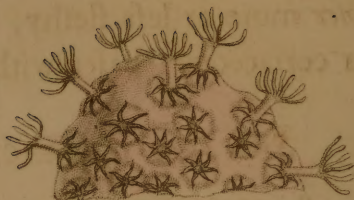
Ellis act. angl. 53. t. 20.

ALCYONIUM digitatum.

Lin. Syst. Nat. Gmel. p. 3812.

Mollius et tenerius est Alcyonium genus aliis plerisque zoophytis; speciesque inter se facie habituque longe discrepant. Aliæ nempe ramosæ, Gorgoniarum more, aliæ rotundatæ, aliæ certa forma adeo

adeo carentes ut *amorphæ* nominentur. Per foramina
stellata quibus notatur superficies, protruduntur po-
lypi, seu partes zoophyti quibus inest motus. Spe-
ciei de qua jam agitur, quæque circa oras Britanni-
cas sæpius conspicitur, magnitudinem naturalem in
tabula depingi curavimus.



FINGERED ALCYONIUM.



GENERIC CHARACTER.

Animal (commonly) growing in the form of a plant.

Substance more or less fleshy, gelatinous, spongy, or coriaceous ; beset with polype-cells.

SPECIFIC CHARACTER, &c.

Softish, stemless, lobated, pale ALCYONIUM, with numerous stellated pores.

Lobated starry ALCYONIUM.

SEA-FINGERS ; or digitated ALCYONIUM.

The genus Alcyonium is of a softer nature than most others of the zoophyte tribe, and the different species vary greatly in appearance ; some being branched in the manner of the Gorgoniæ ; others roundish, and others amorphous or without any regular form : the surface is marked by stellated pores, through which are protruded the polypes, or moving parts of the zoophyte. The species here represented is figured in its natural size, and is not uncommon on the British coasts.

MANTIS PRECARIA.



CHARACTER GENERICUS.

Caput nutans, maxillosum, palpis instructum.

Antennæ fetacæ.

Alæ quatuor, convolutæ: inferiores plicatæ.

Thorax linearis, elongatus, angustatus.

Pedes gressorii.

CHARACTER SPECIFICUS, &c.

MANTIS olivacea, thorace subciliato, elytris viridibus macula ferrugineo alboque dimidiata, alis hyalinis viridi maculatis.

MANTIS thorace subciliato, elytris flavis: ocello ferrugineo.

Lin. Syst. Nat. p. 691.

MANTIS thorace subciliato, elytris virefcentibus, ocello ferrugineo.

Lin. Syst. Nat. Gmel. p. 2050.

Degeer inf. 3. p. 406. t. 36. f. 4.

Seb. mus. 4. t. 67. f. 3—6. *Mer. Sur.* t. 66.

Mantis precaria, (Hottentottorum idolum?) in variis Africæ regionibus conspicitur, et magnitudine vera in tabula exprimitur.



THE SACRED MANTIS.



GENERIC CHARACTER.

Head nutant, armed with jaws and furnished with palpi.

Antennæ setaceous.

Wings four; convolute: the lower ones plicated.

Thorax linear, elongated.

Feet formed for walking.

SPECIFIC CHARACTER, &c.

Olivaceous MANTIS with the thorax ciliated with small spines; the wing-sheaths green with a divided white-and-brown spot; the wings hyaline spotted with green; the fore-legs marked by a large brown spot.

The Hottentot MANTIS, or Idol MANTIS.

This insect, the supposed idol of the Hottentots, is a native of several parts of Africa, and is represented in its natural size.

PTEROTRACHEA CORONATA.



CHARACTER GENERICUS.

Corpus liberum, gelatinosum, pinna gelatinosa
mobili ad abdomen vel caudam.

Oculi duo intra caput.

Lin. Syst. Nat. Gmel. p. 3137.

CHARACTER SPECIFICUS, &c.

PTEROTRACHEA ventre caudaque pinniferis,
capitis proboscide tereti perpendiculari, frontis
coronula aculeis decem.

Forsk. Fn. aeg. ar. p. 117. n. 41.

PTEROTRACHEA coronata.

Lin. Syst. Nat. Gmel. p. 3137.

Luculente et accurate explicuit hanc speciem celeberrimus Forskal in opere cui titulus *Descriptiones Animalium*, &c. &c. *quæ in itinere orientali*, &c. &c.

“ *Corpus* subteres: crassitie pollicis: longitudine fere spithamæ. *Caput* antice rotundatum; coronula in fronte spinis decem conicis: harum tres utrinque constituunt lineas medias perpendiculares: extra
illas

illas superne utrinque duæ, una supra alteram. Infra coronam *Proboscis* dependet, fere duos pollices longa, nervo medio et apice in capitulum incrassato, albido: ore terminali. Apex hyalinus: et tota proboscis gelatina farta videtur: sub illa maculæ albidæ, parvæ, sparsæ interdum. Oculus uterque ad nucham interne prope marginem; hinc satis ab invicem remoti; constant macula ovali, transversa, fusca; cui introrsum imponitur *infundibulum*, seu conus inversus, obscure testaceus; recipiens sphaerulam hyalinam, similem bullæ aereæ. *Truncus* ab oculis ad caudam fere cylindricus; pone superne rotundatus, nec nisi basi cum cauda conjunctus, lævis, immaculatus: inferne juxta pinnam albo-maculatus: abdomen subtus totum asperum. Ante pinnam *Sacculus* duplex, an gula? ovatus, pendulus, hyalino-maculatus. *Anus* proxime supra ligamentum caudæ. In quibusdam supra anum in extremo trunco *nucleus* globosus, albidus, lente minor. *Cauda* verticalis, pollicaris; antice, sed inferius longo collo adnata trunco; cæterum triangularis, utrinque lineis quatuor aculeatis; angulato-scabra, terminata pinnula utrinque horrizontali, semicordata, cauda quater brevior, prominente ultra caudæ apicem; ubi margine incumbit margini caudæ. *Pinna* pone medium trunci, orbicularis, diametro pollicis, compressa, basi incrassata, laminisque trunci albis utrinque crenatis, affixa. Subtus in margine pinnula alia, campanulata, puncto medio affixa, hyalina.

Habitat in Mari Mediterraneo et Archipelago."



CORONATED PTEROTRACHEA.

GENERIC CHARACTER.

Body nayant, gelatinous, furnished with a fin at the abdomen or tail.

Eyes two, within the head.

SPECIFIC CHARACTER.

PTEROTRACHEA with abdomen and tail pinnated, the head marked with aculeated lines in front, the proboscis columnar and perpendicular.

It is to the celebrated Forſkal that we are indebted for an accurate deſcription of this curious animal.

Body ſubcylindric; about an inch in diameter, and almoſt a ſpan in length. The head is rounded on the fore-part, and furniſhed in front with a coronet of ten conical ſpines: of theſe three on each ſide conſtitute ſo many perpendicular middle-lines: beyond and above which, on each ſide, are two more; one above the other. Beneath the coronet hangs the probofcis, which is nearly two inches long, with a whitish middle-nerve, and an increaſſated, capitulated, hyaline tip, and terminal mouth. The whole probofcis appears as if filled with jelly: beneath

neath it are sometimes seen small scattered whitish spots. The eyes are situated on each side the back of the neck, internally, near the margin; and are pretty remote from each other. Each consists of a transverse, oval brown spot, on which is placed inwards an infundibulum or inverted cone of an obscurely-testaceous color, receiving a hyaline spherule resembling an air-bubble. The trunk from the eyes to the tail is nearly cylindrical; rounded behind on the back-part, and only connected with the tail at its base: it is smooth and without spots; but beneath, near the fin, is spotted with white. The whole abdomen is rough beneath: before the fin is seated a double sacculus, (perhaps the stomach?) it is ovate, pendulous, hyaline-spotted. The vent is seated near the ligament of the tail. In some specimens, near the vent, at the end of the body, is a globose whitish nucleus, smaller than a lentil. The tail is vertical, an inch long, connected to the body in front, (but beneath it), by a long neck: it is triangular, with the angles rough, and has four aculeated lines on each side, and is terminated on each side by a semi-cordate, horizontal pinnule four times shorter than the tail, and projecting beyond its tip, where its edge rests on that of the tail. The fin is situated beyond the middle of the body, and is orbicular, an inch in diameter, compressed, thickened at the base, and affixed to the white laminæ of the trunk, which are crenated on each side. Beneath, in the margin, is another pinnule, which is bell-shaped, hyaline, and affixed by a middle point.

It is a native of the Mediterranean and Archipelago.

FRINGILLA DOMESTICA.



CHARACTER GENERICUS.

Rostrum conicum, rectum, acuminatum.

Lin. Syst. Nat. p. 317.

CHARACTER SPECIFICUS, &c.

FRINGILLA castanea, nigro maculata, fascia alarum alba; subtus grisea, gula maris nigra.

FRINGILLA remigibus rectricibusque fuscis, corpore griseo nigroque, fascia alarum alba solitaria.

Lin. Syst. Nat. p. 323.

PASSER DOMESTICUS.

Gesn. av. 643.

Aldr. orn. 2. p. 528.

Will. orn. p. 182.

Fringillam domesticam omnibus notissimam pervacaneum forsan sit minutius describere. Tota avis interdum nigrat, interdum albet: quæ ambæ varietates in Museo Leveriano asservantur.



THE
COMMON SPARROW.



GENERIC CHARACTER.

Bill perfectly conic, slender towards the end, and very sharp-pointed.

SPECIFIC CHARACTER, &c.

Chestnut-coloured FINCH, spotted with black; beneath greyish; the throat of the male black.

The COMMON, or HOUSE-SPARROW.

Le MOINEAU.

Bris. orn. 3. p. 72.

Buf. ois. 3. p. 474.

This bird is so generally known, that a particular description would be unnecessary. It is sometimes found entirely black, and sometimes perfectly white; both which varieties occur in the Leverian Museum.

ACTINIA CRASSICORNIS.



CHARACTER GENERICUS.

Corpus se affigens basi, carnosum, oblongum, teres, contractile, viviparum.

Os terminale, dilatabile, tentaculis cinctum.
(*Apertura* præter os nulla.)

CHARACTER SPECIFICUS, &c.

ACTINIA rubra, cirris conico elongatis.

Mull. Zool. dan. 1. p. 77.

ACTINIA (senilis) subcylindrica transverse rugosa.

Lin. Syst. Nat. p. 1088.

ACTINIA rugis longitudinalibus, proboscibus longis crassis.

Bast. opusc. subs. 3. p. 120. t. 13. f. 1.

E maximis est Actinia crassicornis quotquot in Europa generantur; et rarior longe est Actinia *Anemone* seu *variata*, quæ apud omnes fere oras Britannicas rupibus et aliis id generis adhæret. Color generalis magis minusve rubet pro diversitate speciminum, aliquando etiam in maculas striasque vel faturatiores

faturatiores vel pallidiores dispositus. Tentacula quoque, quæ magna sunt et plurima, variis umbris tinguntur et coloribus, rubris, flavescentibus, &c. In nostris nec non aliis Europæ litoribus conspici possit hæc species, eadem magnitudine quam ostendit tabula.



THE GREAT ACTINIA.



GENERIC CHARACTER.

Body fixing itself by the base; fleshy, oblong, cylindric, contractile, viviparous.

Mouth terminal, expansile, furrounded with tentacula.

(No other opening except the mouth.)

SPECIFIC CHARACTER, &c.

Great red ACTINIA with thick conical tentacula.

The larger SEA-ANEMONE.

The thick-clawed SEA-ANEMONE.

The *Actinia crassicornis* is one of the largest of the European species: it is much less common than the *Actinia Anemone*, or variegated *Actinia*, so frequently seen on most of the British coasts, adhering to rocks, &c. The general color of the *A. crassicornis* is red, more or less deep in different individuals,

duals, and sometimes disposed into a kind of streaks and patches of darker and lighter colors: the tentacula, which are large and very numerous, are also varied with different shades of red, yellowish, &c. It is found on our own, as well as on many other European coasts, and is here represented in its natural size.

PAPILIO THOAS.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatae.

Alæ sedentis erectæ sursumque conniventes, (volatu diurno.)

Lin. Syst. Nat. p. 744.

CHARACTER SPECIFICUS, &c.

PAPILIO alis nigris flavo-fasciatis; posterioribus subtus flavis; fascia nigra lunulisque cyaneis.

Fab. sp. ins. 2. p. 19.

Lin. Syst. Nat. Gmel. p. 2240.

PAPILIO Ephebus orientalis niger, &c.

Seb. mus. 4. t. 38. fig. 6. 7.

Americam meridionalem incolit Papilio Thoas, magnitudine naturali in tabula depictus.



T H O A S.



GENERIC CHARACTER.

Antennæ, thickening towards the upper part, and generally terminating in a knob.

Wings (when fitting) erect, and meeting upwards.
(Flight diurnal.)

SPECIFIC CHARACTER, &c.

Brownish-black PAPILIO, with the wings banded with ochre-yellow: the lower ones yellow beneath, with a black band and blue crescents.

Le FESTONNÉ de Gouadeloupe.

Aubent. Pl. Enl. 69.

The Papilio Thoas is a native of South America, and is represented on the plate in its natural size.

SCARABÆUS ELEPHAS.

CHARACTER GENERICUS.

Antennæ clavatæ capitulo fissili.

Tibiæ anticæ sæpius dentatæ.

Lin. Syst. Nat. p. 541.

CHARACTER SPECIFICUS, &c.

SCARABÆUS villosus fuscus, thorace gibbo bicorni, capitis cornu unidentato apiceque bifido.

SCARABÆUS ELEPHAS.

Fab. sp. ins. 1. p. 8.

Lin. Syst. Nat. Gmel. p. 1529.

Specimen eximium suppeditavit Museum Britannicum, unde depingitur rarissimi insecti vera magnitudo. Africam incolit Scarabæus Elephas, a scarabæo Actæone, cui tamen admodum affinis est, insigniter differens, quod tomento seu villo quasi holoserico fusco fere totus vestiatur, exceptis cruribus.



THE
ELEPHANT BEETLE.

GENERIC CHARACTER.

Antennæ divided at the tip into lamellæ.

Tibiæ, or second joints of the fore legs generally toothed.

SPECIFIC CHARACTER, &c.

Great villose brown BEETLE, with gibbous two-horned thorax; the horn on the head furnished with a single tooth and bifid at the tip.

The Great downy BEETLE.

The African ELEPHANT BEETLE.

That extremely rare insect, the *Scarabæus Elephas*, is here represented in its natural size, from a very fine specimen in the British Museum. It is nearly allied to the *Scarabæus Actæon*, from which, however, it strikingly differs in being almost entirely covered, except on the legs, with a kind of down or soft villus of a brown color.

TROCHILUS PORPHYRURUS.



CHARACTER GENERICUS.

Rostrum subulato-filiforme, apice tubulato, capite longius: Mandibula superior vaginans inferiorem.

Lingua filiformis, filis duobus coalitis tubulosa.

Pedes ambulatorii.

Lin. Syst. Nat. p. 189.

CHARACTER SPECIFICUS, &c.

TROCHILUS curvirostris fuscus, jugulo aterrimo holoserico, fascia utrinque collari caudaque purpureis.

TROCHILUS Mango. var. β .

Lin. Syst. Nat. Gmel. p. 491.

Lath. ind. orn. p. 307.

Formosissimam Trochili speciem depinximus, Trochilo Mango Linnæi admodum affinem, coloribus tamen ab illo longe discrepantem. Ostenditur in tabula naturalis magnitudo. Generatur avis in America meridionali, insulisque vicinis.

TROCHILUS POLYTHORAX

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THE
PURPLE-TAILED HUMMING-BIRD.



GENERIC CHARACTER.

Bill slender, tubular, the upper mandible sheathing the lower.

Tongue very long, missile, formed of two conjoined cylindric tubes.

Toes three forward, one backward.

SPECIFIC CHARACTER, &c.

Brown curve-billed HUMMING-BIRD, with velvet-black throat, and purple neck-stripes and tail.

Mango HUMMING-BIRD. var. A.

Lath. syn. 2. p. 759.

This highly beautiful species seems greatly allied to the *Trochilus Mango* of Linnæus, or Mango Humming-Bird; but differs very much in its colors. It is represented in its natural size, and is a native of South America and the neighbouring islands.

ALCYONIUM ARBOREUM.



CHARACTER GENERICUS.

Animal (plerumque) plantæ forma crescens.

Stirps fixa, carnosæ, gelatinosæ, spongiosæ, vel coriacea, *osculis polypiferis* obsita.

CHARACTER SPECIFICUS, &c.

ALCYONIUM stirpe arborea ramis obtusis, poris papularibus.

Lin. Syst. Nat. p. 1293.

ALCYONIUM ramosum, poris papillaribus, in tubercula lateralìa terminaliaque congestis.

Pall. el. zooph. p. 347.

Totius generis speciem longe maximam depinximus, quæ interdum ad pedum quinque, sex, et etiam septem altitudinem pertingit, cujusque longitudini respondet caudicis et ramorum proportionata crassitudo. Dubitari fortasse possit an ad Alcyonia revera pertineat, et nescio annon majori jure Gorgoniis annumeretur, cum non parva sit partis internæ densitas, licet careat substantia ista tenaci et quasi cornea, quæ plerumque cernitur in Gorgoniis. Crassa est pars externa, tenerior, et tuberculis obsita incertis

certis intervallis, in quibus includuntur polypi, feu
animales terminationes. Notatur apex uniuscujus-
que tuberculi foramine stellato ex octo segmentis
constante. Incolit Alcyonium arboreum maria sep-
tentrionalia. Color generalis rubeus est, sive rosa-
ceus, in diversis speciminibus plus minus saturatus.
In Museo Britannico conspici possit eximium speci-
men.



ARBORESCENT ALCYONIUM.



GENERIC CHARACTER.

Animal (commonly) growing in the form of a plant.

Substance more or less fleshy, gelatinous, spongy, or coriaceous : beset with polype-cells.

SPECIFIC CHARACTER, &c.

ALCYONIUM with arborescent stem, obtuse branches, and papillary pores.

Great ALCYONIUM.

Tree ALCYONIUM.

This is by far the largest of all the genus ; specimens being sometimes found of five, six, or seven feet in height, with the trunk and branches of very considerable thickness. It may perhaps be doubted whether this species should be placed in the genus Alcyonium ; and it would perhaps be more proper to rank it under that of *Gorgonia* ; the internal part, though not of that strong, horny substance which most of the *Gorgonias* exhibit, being yet of a considerable density. The external or softer part is of a very considerable thickness, and is beset at unequal distances

distances with tubercles in which the animal terminations or polypes are enclosed. The top of each tubercle is marked by a foramen of a stellated form, consisting of eight segments. The general color of this species is rose or pink-color, more or less deep in different individuals. It is a native of the northern seas. An elegant specimen is preserved in the British Museum.

ARANEA NOBILIS.



CHARACTER GENERICUS.

Pedes octo.

Oculi octo.

Os unguibus, seu retinaculis duobus.

Palpi duo articulati; masculis genitalibus capitati.

Anus papillis textoriis.

Lin. Syst. Nat. p. 1030.

CHARACTER SPECIFICUS.

ARANEA thorace fulvo maculis sex, abdomine
flavo maculis septem nigris.

In celeberrimi Joannis Hunteri museo specimen
affervatur eximium pulchræ hujus araneæ, a Sumatra
in Angliam illatum et spiritu vini conditum. Tho-
rax eleganter aurantius, maculis nigris ornatus; ab-
domen læte flavum, maculis majoribus nigerrimis
decoratum. Crura altera ex parte nigrant, ex altera
flavent.

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may 98. 222.

THE
GOLDEN SPIDER.



GENERIC CHARACTER.

Eight *Legs*.

Eight *Eyes*.

Mouth furnished with *Palpi* or *Feelers*, the tips of which (in the males) distinguish the sex.

Abdomen terminated by papillæ or teats, through which the insect draws its thread.

SPECIFIC CHARACTER.

SPIDER with the thorax orange-coloured with six black spots: the abdomen yellow with seven ditto.

Of this beautiful species I have observed a specimen in the Museum of the late Mr. John Hunter. The thorax is of an elegant orange-colour, spotted with black; the abdomen of a bright yellow with larger deep-black spots: the legs half black and half yellow: the specimen is preserved in spirits of wine, and was received from Sumatra.

ACARUS RHOMBEATUS.



CHARACTER GENERICUS.

Pedes octo.

Oculi duo ad latera capitis.

Tentacula duo articulata, pediformia.

Lin. Syst. Nat. p. 1022.

CHARACTER SPECIFICUS.

ACARUS rotundatus fuscus, abdomine subcrenato, thorace utrinque macula albida rhombo-diffracta fusco-punctata.

Acari rhombeati depingitur in tabula tum vera tum aucta magnitudo. Affinis admodum est eleganti isti insecto, quod in hoc opere descripsimus nomine *acari aurati*, quodque colubro *Najæ*, five *Cobra de Capello* se affigit. Adhæsit species, de qua jam loquimur, cuti magni serpentis in Museo Britanico asservati. Eadem fere est magnitudine atque acarus auratus; non autem maculis iisdem lucidis superbit, sed nota præcipue distinguitur albida, sub-rhombea, utrinque juxta thoracem posita, cujus latera exteriora in medio interrumpuntur, seu quasi diffranguntur. Punctulis quoque aspergitur impressis, fuscis. Crurum aliarumque partium proportio eadem fere illi est atque acaro aurato.



May 98. 1821

THE LOZENGE ACARUS.



GENERIC CHARACTER.

Eight *Legs*.

Two *Eyes*, situated on the sides of the head.

Two *Tentacula*, jointed, and shaped like feet.

SPECIFIC CHARACTER.

Roundish brown ACARUS, with the abdomen subcrenated, and a large sub-rhomboid laterally-diffracted whitish mark speckled with brown on each side the thorax.

The insect here represented in its natural size, as well as magnified, is nearly allied to that beautiful species described in a former number of this publication under the title of *Acarus auratus*, and which attaches itself to the *Coluber Naja*, or Cobra de Capello. The present species was discovered on a large serpent preserved in the British Museum. In size it nearly agrees with the *auratus*, but instead of the brilliant marks by which that insect is adorned, it is principally distinguished by a large subrhomboid whitish patch or spot situated on each side the thorax: this spot is broken or interrupted laterally on its exterior side: it is also scattered over with several impressed brown dots or specks. The proportion of the legs and other parts is nearly the same as in the *auratus*.

MEROPS GULARIS.



CHARACTER GENERICUS.

Rostrum curvatum, compressum, carinatum.

Lingua apice laciniata.

Pedes gressorii.

Lin. Syst. Nat. p. 182.

CHARACTER SPECIFICUS.

MEROPS niger, fronte uropygioque cæruleis,
abdomine cæruleo maculato, gula rubra.

Nihil dubitamus quin nova sit hæc species, et nunc primum descripta. Color primarius est quasi holoserico-aterrimus, nitore cæruleo uropygii similimo illi qui in dorso Alcedinis Ispidæ dominatur. Maculæ quoque abdominis ejusdem sunt coloris, et a rostro super utrumque oculum ducta est fascia cærulea. Per jugulum decurrit striga seu macula sanguinea. Ferrugineæ sunt remigum aliquorum partes inferiores, notatis alis, si clausæ fuerint, macula oblonga, concolori. Remigum interiorum margines leviter e cæruleo virescunt, nec non pennæ duæ quas

L

habet

habet cauda intermedias. Rostrum pedesque ni-
grant. Africam incolit pulcherrima hæc avis, et in
regione *Sierra Leona* nominata præcipue conspi-
citur.



THE
RED-THROATED BEE-EATER.



GENERIC CHARACTER.

Bill curved, compressed, carinated and sharp-pointed.

Tongue (generally) lacinated at the tip.

Feet grefforial; i. e. three toes forward and one backward; the three lower joints of the middle toe closely joined to those of the outmost.

SPECIFIC CHARACTER.

Black BEE-EATER, with the forehead and rump blue, the abdomen spotted with blue; the throat red.

It cannot be doubted but that the bird here figured is an entirely new species, hitherto undescribed. Its prevailing color is the finest velvet-black; the blue which appears on the tail-coverts exactly resembling that of the *Alcedo Ispida* or Common Kingfisher: the spots on the abdomen are of the same color, and a line or band of the same is carried over each eye from the corners of the beak. Down the throat

runs a stripe or patch of blood-red, and the lower half of some of the wing-feathers is of a deep ferruginous; forming an oblong patch of that color on each wing when closed: the edges of the wing-feathers nearest the body are marked slightly with blue-green, as are also the two middle tail-feathers: the bill and legs are black. This beautiful bird is a native of Africa, and is principally found in Sierra Leona.

OSTRACION AURITUS.



CHARACTER GENERICUS.

Dentes teretes, porrecti, obtusiusculi.

Branchiarum apertura linearis.

Corpus osse integro loricatum.

CHARACTER SPECIFICUS.

OSTRACION fuscus, spina utrinque supraoculari, duabus utrinque dorsalibus, duabus ventralibus, unica laterali.

Circa insulas maris pacifici conspicitur hæc species, a congeneribus facile distinguenda: magnitudine vera in tabula exprimitur.



THE
EARED OSTRACION.



GENERIC CHARACTER.

Teeth cylindric, blunt, pointing forwards.

Branchial Aperture linear.

Body mailed by a complete bony covering.

SPECIFIC CHARACTER.

Brown OSTRACION, with a spine over each eye, two on each side the back; the same on each side the abdomen; and one on each side the body.

This species is found about the islands of the pacific ocean, and is readily distinguished from the rest of its congeners: the plate represents it in its natural size.

TEREBELLA ROSTRATA.

CHARACTER GENERICUS.

Corpus oblongum, repens, nudum, penicillis branchiisque lateralibus.

Tentacula capillaria, ciliata.

CHARACTER SPECIFICUS, &c.

TEREBELLA tetraedra, penicillorum corporis serie quadruplici, palato quasi elongato.

Lin. Syst. Nat. Gmel. p. 3113.

APHRODITA rostrata.

Pall. misc. zool. p. 106. t. 8. f. 14—18.

Species *Terebellæ* quam magnitudine naturali repræsentat tabula in oceano Indico et Americano præcipue invenitur. Color est livide cinereus, vel fusco-plumbeus, penicillis seu fasciculis dorsalibus obscurioribus quam sunt reliquæ partes, fasciculi autem setosi laterales flavent. A quibusdam physicis pro veris Scolopendris habitæ sunt *Terebellæ*, quibus sane habitu seu forma generali sunt simillimæ.



THE
ROSTRATED TERESELLA.



GENERIC CHARACTER.

Body oblong, repent, with lateral fascicles and branchiæ.

Tentacula capillary and ciliated.

SPECIFIC CHARACTER, &c.

TEREBELLA with subquadrangular body, four rows of tufts, and lengthened palate.

Bristled INDIAN TERESELLA.

The species of Terebella here represented in its natural size is principally found in the Indian and American seas. Its color is a livid or lead-coloured brown; the tufts on the back, or ramified organs, being somewhat deeper than the rest of the animal: but the lateral fascicles of bristles are yellowish. The Terebella by some naturalists have been considered as real Scolopendræ, to which indeed, in point of habit or general appearance, they are extremely allied.

COLUBER PICATUS.



CHARACTER GENERICUS.

Scuta abdominalia.

Squamæ subcaudales.

Lin. Syst. Nat. p. 275.

CHARACTER SPECIFICUS.

COLUBER albus fasciis nigris vittæ angustæ nigræ subtus ductæ huc illuc cohærentibus.

Scut. abdom. 186. Squam. subcaud. 36.

Ostenditur in tabula vera magnitudine pulcherri-
mus coluber, idem nempe cum illo qui depingitur
in Sebæ thesauri volumine secundo, tabulæ quinquag-
esimæ quartæ numero primo designatus, quique in
Systemate Naturæ, nec non *Amoenitatibus Academicis*,
Coluber dicitur *Domicella*. A descriptione autem
Linnæana Colubri *Domicellæ* longe differt specimen
hoc nostrum tum scutorum abdominalium tum squa-
marum subcaudalium numero. Generalem animalis
faciem fide satis et accurate repræsentat quæ in Sebæ
thesauro delineatur effigies; deducta tamen videtur
similitudo a majore specimine quam quod in tabula
nostra

nostra exprimitur. Vitta nigra per totum abdomen
a capite ad caudam continuata, præcipua est speciei,
quoad colores, distinctionis nota. In India? innas-
citur coluber picatus.



THE
PIED SNAKE.



GENERIC CHARACTER.

Transverse *Lamellæ* under the abdomen.
Broad alternate *Scales* under the tail.

SPECIFIC CHARACTER.

White SNAKE with black bands uniting here and there with a continued narrow black stripe beneath.

Abdominal scuta 186. *Subcaudal scales* 36.

The beautiful Snake here represented in its natural size, is the species figured in the second volume of Seba's *Thefaurus* at plate 54. fig. 1. and which in the *Systema Naturæ* and the *Amœnitates Academicæ* is quoted as the *Coluber Domicella* of Linnæus. The specimen however from which the present figure was drawn differed widely in respect to the number of abdominal scuta and subcaudal scales from the Linnæan description in the works above-mentioned. The figure given by Seba is a very good general representation, and appears to have been taken from a larger

larger specimen than that exhibited on the annexed plate. A leading character as to color in this animal seems to be the continued narrow black band from head to tail along the whole body beneath. It is supposed to be a native of India.

ORIOLOUS PHOENICEUS.



CHARACTER GENERICUS.

Rostrum conicum, convexum, acutissimum, rectum: mandibula superiore paulo longiore, obsolete emarginata.

Lingua bifida, acuta.

Pedes ambulatorii.

Lin. Syst. Nat. p. 160.

CHARACTER SPECIFICUS, &c.

ORIOLOUS niger, humeris phœniceis flavo marginatis.

ORIOLOUS niger, alarum tectricibus fulvis.

Lin. Syst. Nat. p. 161.

ICTERUS pterophœniceus.

Briss. av. 2. p. 97.

In omni fere America Septentrionali conspicitur Oriolus phœniceus, Zea infectisque præcipue victitans: magnitudo ei est quasi Sturni vulgaris.



THE
RED-SHOULDERED ORIOLE.



GENERIC CHARACTER.

Bill conic, convex, very sharp-pointed, strait;
the upper mandible rather longer than the
lower, and slightly emarginated.

Tongue bifid, sharp-pointed.

Feet formed for walking.

SPECIFIC CHARACTER, &c.

Black ORIOLE with crimson shoulders margined
with yellow.

The Red-winged STARLING.

Catesb. Car. 1. p. 13. *t.* 13.

Red-winged ORIOLE.

Pennt. Arch. Zool. 2. p. 255.

This bird is found in almost all parts of North
America, feeding principally on Maiz and insects :
its size is that of a Starling.

GYRINUS MEXICANUS.



GYRINUS fusco-ferrugineus nigro maculatus, pinnis branchialibus ramosissimis, pedibus fissis, plantis tetradactylis, palmis pentadactylis.

Ranæ Paradoxæ Linnæi larva seu gyrinus, qui nominari vulgo solet *rana-piscis Surinamensis*, fideliter fatis a Domino *Edwards* depictus est in Actis Anglicis, a Seba, in thesauri rerum naturalium tomo primo, nec non a Domina *Merian* in appendice quam adjecit operi de insectis Surinamensibus. Mexicanum putatur animal quod in tabula vera magnitudine ostenditur, quodque, cum revera fortasse nihil aliud sit quam gyrinus lacertæ cujusdam grandioris Americanæ, mira tamen et singulari forma vix cedere videtur ipsi Sireni, quæ diu adeo Linnæum dubitantem torfit, ut ejus causa novum ordinem, nempe *Meantes* tandem instituerit. Habitu seu facie generali *ranæ-pisci*, quem jam memoravimus, similis quodammodo Gyrinus Mexicanus, branchias tamen habet extrinsecus hiantes, quales sunt piscium; quarum permagnæ sunt aperturæ, ductaque utrinque a capite per jugulum valvula externa quasi dividit caput a thorace. Constant branchiæ ipsæ e quatuor semicirculis offeis seu cartilagineis, parte interna, more piscium,

piscium, pectinata. Super valvulas utrinque sitæ sunt pinnæ tres branchiales seu partes ramosæ, in filamenta plurima capillaria pulcherrime divisæ. Hactenus Sireni similis est Gyrinus Mexicanus, nisi quod Sireni parvula admodum sint branchiarum foramina. Major longe videtur rictus oris quam revera est, quod ab angulo utroque ducatur fulcus longe ultra ipsum hiatum. In fronte maxillæ superioris series est minutissimorum dentium. Lingua magna, lævis, apice rotundato. Pedes unguibus invalidis instructi pinnulis plane carent. Digni pedum anticorum quatuor sunt, posticorum quinque. Latera corporis rugis plurimis fulcantur, et a branchiis proveniens linea impressa usque ad caudam continuatur. Qui cutem accurate examinet, innumeros conspiciet quasi atomos albicantes una cum generali colore commistos, non secus ac cernere est in Sirenum cute. Specimen ipsum in Museo Britannico asservatur.

Huic descriptioni non supervacaneum sit adjicere, *ranæ-pisci* Surinamensi nulla esse opercula, pinnulasque branchiales ramosas; pedes quoque unguibus carere, et pedes posteriores conspicue esse pinnatos: corpus præterea in ventrem tumescere, more gyrinorum Europæorum, intestinaque in spiram convoluta cutem raro adeo occultare ut discerni nequeant.



N.T.

July 29



July 98 DM

A

MEXICAN TADPOLE.



Ferruginous-brown TADPOLE, spotted with black; with finely-ramified branchial fins, and unwebbed feet: the fore feet four, the hind five-toed.

The Tadpole or Larva of the *Rana paradoxa* of Linnæus is commonly termed the Frog-fish of Surinam, and is well figured by Edwards in the Philosophical Transactions; by Seba in the first volume of his *Theſarus Rerum Naturalium*; and by Madam Merian in the Appendix to her work on the Surinam Inſects.

The animal here represented in its natural ſize is ſuppoſed to be a native of Mexico; and though perhaps no other than the Larva or Tadpole of ſome large American Lizard, ſeems a ſcarce leſs ſingular and curious animal than the Siren, ſo much and ſo long the ſubject of dubious ſpeculation to Linnæus, and for which he at length inſtituted his additional order termed *Meantes*. In its general appearance it bears ſome reſemblance to the Larva of the *Rana paradoxa* above-mentioned, but is furniſhed with gills opening externally in the manner of a fiſh: the openings are very large, and the operculum or external

ternal flap is continued from the sides of the head across the throat beneath, so as completely to insulate the head from the breast: the gills themselves consist of four semicircular bony or cartilaginous arches, which are denticulated or serrated on their internal or concave part like those of fishes: on the opercula or external flaps are situated three very large and elegant branchial fins or ramified parts, divided and subdivided into a vast number of slender or capillary processes: In these particulars it resembles the Siren, except that in that animal the external opening to the gills is very small: the mouth is furnished in the front of the upper jaw with a row of extremely minute teeth: the tongue is large, smooth, and rounded at the tip: the rictus or gape, when the mouth is closed, appears considerably wider than it really is; owing to a lateral sulcus proceeding from each corner to some distance: the feet are entirely destitute of webs, and the toes are furnished with weakish claws: the fore-feet have four, the hind-feet five toes. Exclusive of the general color of the animal, the whole skin, when minutely examined, appears to be scattered over with very minute white specks resembling those on the surface of the Siren: the sides of the body are marked by several strong rugæ or furrows, and an impressed lateral line or sulcus is continued from the gills to the tail. This curious animal is preserved in the British Museum.

It may not be improper to add that the Frog-fish of Surinam has no external opercula or gill-covers, nor ramified branchial fins: the feet also are destitute

tute of claws, and the hinder feet are strongly webbed: the body also is of a much more tumid or ventricose appearance, and the spiral folds of the intestines, as in the common European tadpoles, may be generally perceived through the skin.

ESOX STOMIAS.



CHARACTER GENERICUS.

Caput supra planiusculum; mandibula superiore plana, brevior: inferiore punctata. *Dentes* in maxillis, lingua.

Membrana branchiostega radiis septem vel octo.

Corpus elongatum.

Lin. Syst. Nat. p. 515.

CHARACTER SPECIFICUS, &c.

ESOX dentibus quatuor cæteris multo longioribus ore clauso prominentibus.

VIPERA marina.

Catesb. Car. 2. *append.* p. 19. *t.* 19.

Rarum hunc piscem, maris mediterranei incolam, cui forsan melius esset separatum genus instituere quam esocibus annumerare, primus descripsisse videtur Catesbeius, ex amianto specimine, quod in manus venerat celeberrimi Sloanii, quodque in Museo Britannico hodie asservatur; cui tamen superficies longo fortasse temporis decursu paululum detrita, reticulata non est seu hexagono-notata more figuræ

figuræ quam delineavit Catesbeius. Minor longè
est effigies hæc nostra magnitudine naturali; longus
enim est ipse piscis octodecim uncias. Color vivo
dicitur obscure fusco-virescere. Conspici quoque
possit specimen in Museo Leveriano.

pearance expressed in the figure of Catesby: this perhaps may have been obliterated by length of time. The representation here given is considerably smaller than the natural size; the fish being eighteen inches in length. Its color when living is said to be an obscure greenish-brown. A specimen occurs also in the Leverian Museum.

TETRAO CALIFORNICUS.



CHARACTER GENERICUS.

Macula prope oculos nuda, papillosa.

Lin. Syst. Nat. p. 273.

CHARACTER SPECIFICUS.

TETRAO plumbeus, crista verticali erecta, gula
(maris) nigra albo cincta, abdomine testaceo
lunulis nigris.

Major paulo est coturnice communi avis hæc plane nova et jam primo descripta. Color præcipuus est subcæruleo-cinereus, seu columbinus. Frons fordide ferruginea. Gula nigra, arcu gilvo circumdata. Conteguntur latera colli pennis quas *lanceolatas* vocant phyfici, sed brevibus, marginem nigrum, apicem gilvum habentibus; ita ut collum utrinque maculis plurimis gilvis distinguatur. Pectoris pars inferior gilvo-saturatior, seu testacea, pennis vestitur rotundatis, quarum margines nigri. Ferrugineus est abdominis color, pennis tamen ibi quoque nigro marginatis. Amiciuntur latera corporis pennis lanceolatis fuscis, ducta per uniuscujusque medium macula gilva admodum conspicua. Alæ quasi terreo-fuscæ. Cauda cinereo-saturatior.

N

Rostrum

Rostrum pedesque fusca. Brevissimum est rostrum, si cum corpore comparetur, et brevior paulo est mandibula superior inferiori. Connectit singulos pedum digitos membrana a basi ad primum usque geniculum producta. Vertex capitis crista eleganti decoratur e pennis quinque vel sex nigris constante, quæ primo erectæ assurgunt, dein antrorsum leviter curvantur, gradatim a radicibus ad apices truncatos dilatatae, quarumque pars plumata ita utrinque replicatur, ut superficies interiores sese invicem fere contingant. Caret femina gutture nigro, zonaque gilva. Collum quoque maculas habet obscuriores, pectore et abdomine paulo magis ad fuscum appropinquantibus. E California in Angliam delata est rarissima hæc avis a Domino Menzies, qui non ita pridem in itinere nautico se comitem addidit Domino Vancouver. In Museo Britannico exstat specimen unde depicta est hæc nostra figura.



THE CALIFORNIAN QUAIL.



GENERIC CHARACTER.

Eyes (generally) bounded, either above or on one side, by a granulated naked skin.

Bill convex, short, and strong.

SPECIFIC CHARACTER.

Lead-coloured QUAIL, with upright vertical crest; the throat (of the male) black edged with white, the abdomen yellowish-brown with black crescents.

This bird, which is a new and hitherto undescribed species, is somewhat larger than a common quail. Its general tinge is blueish-cinereous or dove-coloured: the forehead dull-ferruginous: the throat black, bounded by a cream-coloured crescent: the feathers on each side the neck are of a lanceolate or sharpened form, but rather short, each being margined with black and tipped with cream-color; so as to form numerous specks of that color on each side the neck: the lower part of the breast is deep

cream-color or testaceous, each of the feathers, which on this part are of a rounded shape, being edged with black: on the abdomen the feathers are ferruginous, edged in a similar manner with black: the feathers on the sides of the body are of a lanceolate form, and of a brown color, with a very distinct cream-coloured dash down the middle of each: the wings are of an earthy or dull brown; the tail deep-cinereous: the bill and legs dusky; the former remarkably short; the upper mandible a trifle shorter than the lower: the toes are connected at the base by a membrane as far as the first joint: the top of the head is ornamented by an elegant crest, consisting of five or six upright black feathers, bending slightly forwards, and of a shape gradually widening towards the tips, which are of a truncated form, and their webs or sides are doubled inwards in such a manner that the two surfaces nearly meet. The female wants the black throat and cream-coloured margin: the cream-coloured specks on the neck are less distinct, and the breast and abdomen incline somewhat more to brown: in other respects it resembles the male.

This curious bird is a native of California, and was brought over by Mr. Archibald Menzies, who accompanied Captain Vancouver in his late expedition. The specimen from which the present figure was taken is in the British Museum.

SQUALUS VITTATUS.



CHARACTER GENERICUS.

Spiracula quinque ad latera colli.

Corpus oblongum teretiusculum.

Os in anteriore capitis parte.

Lin. Syst. Nat. p. 397.

CHARACTER SPECIFICUS, &c.

SQUALUS glaucus, subtus albidus, supra vittis septem longitudinalibus nigricantibus.

SQUALUS Africanus. S. fasciis septem nigricantibus parallelis longitudinalibus pictus.

Lin. Syst. Nat. Gmel. p. 1494.

Squalum vittatum, mare incolentem Africanum, fatis describit character specificus. Specimen unde depicta est hæc nostra figura, longum quasi octodecim uncias, conspici possit in Museo Britannico.



THE
B A N D E D S H A R K.



GENERIC CHARACTER.

Spiracula five on each side the neck.

Body oblong, somewhat cylindric.

Mouth situated beneath, in the fore part of the head.

SPECIFIC CHARACTER, &c.

Glaucous SHARK, whitish beneath ; marked above with seven longitudinal blackish bands.

GALONNÉ.

Broussonet Act. Gall. 1780. p. 659. n. 9.

The *Squalus vittatus*, sufficiently described in its specific character, is a native of the African ocean; the specimen from which the present figure was taken is preserved in the British Museum, and is about eighteen inches in length.

PHASMA DILATATUM.



CHARACTER GENERICUS.

Antennæ filiformes. *Caput* grande: *Oculi* parvi, rotundati.

Stemmata tria inter oculos sita.

Pedes ambulatorii.

Elytra abbreviata.

CHARACTER SPECIFICUS, &c.

PHASMA thorace dilatato rhombeato pedibusque spinosis, abdomine lanceolato, lateribus ciliato-spinosis.

PHASMA dilatatum.

Act. Soc. Lin. 4. p. 190. t. 18.

Miri et rarissimi insecti magnitudinem naturalem depinximus, quod in Museo Leveriano affervatum Asiaticum esse creditur. Descriptum primo est a Domino Joanne Parkinsone in volumine quarto actorum Societatis Linnæanæ Londinensis, et adjecta est descriptioni effigies eleganter delineata. Ova numerosa parit Phasma dilatatum, quæ plurima ex abdomine speciminis de quo jam loquimur extracta sunt, quorumque unum ostendit tabula vera nec non aucta

aucta magnitudine. Institutum est genus Phasma
in eximio opere Stolliano de insectis ad hanc fami-
liam pertinentibus, et ab illis quæ in genere Mantis
continentur conspicue differentibus; cum quibus
tamen a Linnæo conjuncta sunt; oblito hac in re
accurati discriminis; qua laude nemo celebratior.

Notandum est periisse antennis hujus speciminis,
integris tantummodo geniculis inferioribus.





THE
DILATED PHASMA.



GENERIC CHARACTER.

Antennæ filiform. *Head* large: *Eyes* small and round.

Stemmata three, between the eyes,

Legs formed for walking.

Wing-Sheaths short.

SPECIFIC CHARACTER.

PHASMA with spiny, rhomboid, dilated thorax, spiny legs, and lanceolate abdomen spine-ciliated on the edges.

The rare and highly singular insect represented in its natural size in these plates is preserved in the Leverian Museum, and is supposed to be Asiatic. It was first described by Mr. John Parkinson in the fourth volume of the Linnæan Transactions, where it is also accompanied by an elegant figure. The ova of this species appear to be numerous; a great many having been taken out of the abdomen of the specimen above-mentioned. One of these is represented in its natural size as well as magnified. The
genus

genus Phasma was instituted by Stoll in his beautiful publication on the insects of this tribe, which most evidently differ from those of the genus Mantis, with which they were strangely united by Linnæus, who seems in this instance to have forgotten his usual precision. It should be observed that the antennæ in this specimen were defective; the lower joints alone remaining.

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